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THESIS

IN SILENCE TOWARD THE UNKNOWN: PRINCIPLES OF SPECIAL RECONNAISSANCE AND SURVEILLANCE

by

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June 2016

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13. ABSTRACT (maximum 200 words)

Recently, the debate surrounding special operations has neglected one of its core activities, special reconnaissance and surveillance (SR). The application of advanced technology capacities has overtaken the more traditional intelligence collection. Therefore, SR may become a lost art and science, and certain principles need to be considered to support SR missions. The purpose of this thesis is to identify principles and a theory for SR missions. The thesis asserts that there is a threshold called relative certainty (sufficient actionable intelligence), where a decision maker can make an informed decision based on the intelligence presented. The chosen approach is a qualitative comparative analysis of historical SR missions, including in the South Atlantic War of 1982 and the Inchon landing of 1950. Also, this study suggests special operations forces can improve mission success with the use of the suggested principles of SR: coordination, review, cover, reporting, and exploitation. Finally, this study asserts that there is a distinction between theories that support special operations in achieving the aim and theories explaining the unique utility of special operations, that is, theories *for* special operations and theories *of* special operations. Ultimately, special operations engage a unique set of principles to accomplish successful missions.

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IN SILENCE TOWARD THE UNKNOWN: PRINCIPLES OF SPECIAL RECONNAISSANCE AND SURVEILLANCE

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ABSTRACT

Recently, the debate surrounding special operations has neglected one of its core activities, special reconnaissance and surveillance (SR). The application of advanced technology capacities has overtaken the more traditional intelligence collection. Therefore, SR may become a lost art and science, and certain principles need to be considered to support SR missions. The purpose of this thesis is to identify principles and a theory for SR missions. The thesis asserts that there is a threshold called relative certainty (sufficient actionable intelligence), where a decision maker can make an informed decision based on the intelligence presented. The chosen approach is a qualitative comparative analysis of historical SR missions, including in the South Atlantic War of 1982 and the Inchon landing of 1950. Also, this study suggests special operations forces can improve mission success with the use of the suggested principles of SR: coordination, review, cover, reporting, and exploitation. Finally, this study asserts that there is a distinction between theories that support special operations in achieving the aim and theories explaining the unique utility of special operations, that is, theories *for* special operations and theories *of* special operations. Ultimately, special operations engage a unique set of principles to accomplish successful missions.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AFO	Advance Force Operation
AJP	Allied Joint Publications
ARSOF	Army Special Operation Forces
ATP	Army Techniques Publication
CA	Civil Affairs
CT	Counter Terrorism
COIN	Counterinsurgency
DOD	Department of Defense
ERV	Emergency Rendezvous Points
F3EAD	Find, Fix, Finish, Exploit, Analyze, and Disseminate
FID	Foreign Internal Defense
FM	Field Manual
G(RF)	Operations Staff Raiding Force
HQ	Headquarters
IRA	Irish Republican Army
ISR	Intelligence, Surveillance, and Reconnaissance
JP	Joint Publication
LRDG	Long Range Reconnaissance Group
MOD	Ministry of Defence
NATO	North Atlantic Treaty Organization
OPSEC	Operation Security
R&S	Reconnaissance and Surveillance
RAF	Royal Air Force
RMA	Revolution in Military Affairs
RUC	Royal Ulster Constabulary
SAS	Special Air Service
SBS	Special Boat Squadron
SF	Special Forces

SFA	Security Forces Assistance
SOCOM	Special Operations Command
SOE	Special Operations Executive
SOF	Special Operation Forces
SORA	Special Operations Research Association
SR	Special Reconnaissance and Surveillance
TCG	Tasking and Coordination Group
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UW	Unconventional Warfare
WMD	Weapons of Mass Destruction

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I. INTRODUCTION

> Information and intelligence are the fire and maneuver of the 21st Century.[1]
>
> —Michael T. Flynn,
> former Army lieutenant general and
> director of the Defense Intelligence Agency

A. BACKGROUND

At 1:15 a.m. on the night of 28 February 1943, an explosion struck the hydroelectric plant at Vemork, Norway. The blast did not cause much attention outside the facility, but its effect was powerful. By using stealth and without a single shot fired, Norwegian Special Operations Executive (SOE) agents raided and sabotaged the German heavy water plant. The plant indirectly supported the German effort to build a nuclear bomb. The raid has become one of the most significant sabotage operations in history. Books, movies, and articles have since portrayed the raid.[2]

According to the sabotage group's leader, Joachim Rønneberg, the successful operation depended on "so many things that were just luck and chance."[3] However, as the Roman proverb states, "fortune favors the brave." The raid was made possible because of the essential intelligence available to the planners and executioners. The SOE agents had created their "luck" through months of comprehensive intelligence collection and had been able to gather actionable intelligence on the power plant and the German forces in the area. The SOE used several resources, including civilian insiders, resistance

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[1] Michael Flynn, "Sandals and Robes to Business Suits and Gulf Streams: Warfare in the 21st Century," *Small Wars Journal* (April 20, 2011): 1–7, http://smallwarsjournal.com/blog/journal/docs-temp/739-flynn.pdf.

[2] Dan Kurzman, *Blood and Water: Sabotaging Hitler's Bomb* (New York: Henry Holt and Company, 1997); William Mackenzie, *Secret History of SOE: Special Operations Executive 1940–1945* (London: St. Ermin's Press, 2000); Ray Mears, *The Real Heroes of Telemark* (London: Hodder & Stroughton, 2004).

[3] Joachim Rønneberg cited in Andrew Higgins, "WWII Hero Credits Luck and Chance in Foiling Hitler's Nuclear Ambitions," *New York Times*, November 15, 2015, http://www.nytimes.com/2015/11/21/world/europe/wwii-hero-credits-luck-and-chance-in-foiling-hitlers-nuclear-ambitions.html?_r=0.

fighters, and an advance team of one inside agent and four Norwegian SOE agents. In November 1942, months ahead of the raid, the Norwegians parachuted in the sabotage group to collect and report information to England. The SOE agent inside had been inserted in March 1942. The raid in February 1943 delayed the Germans efforts to build a bomb. Eventually, the Germans decided to remove the heavy water from the hydro plant to Germany. A ferry was used for the relocation and the ferry was subsequently sabotaged by a bomb planted by Norwegian SOE agent in February 1944. Finally, the Allies stopped the Germans from developing an atomic bomb.

Throughout history, the military has used special operations forces (SOF) for direct action missions. This particular core activity is the dominant paradigm for special operations, while foreign internal defense and unconventional warfare are the focus of the current special operations debate.[4] Understandably, direct action or strike operations get more attention and publicity. The effect is concrete and has high visibility. It is not as abstract as an "intelligence report," the immediate "effect" of which can be hard for a novice to assess or understand. However, notably over the last several years, the importance of credible intelligence has increased even more.[5] The networked opponent is flexible and resilient. Sometimes, the enemy is not state-oriented and is harder to identify but easier to neutralize when fixed.[6] The actions needed to create access to the needed information and set conditions for decisions, such as a follow-on raid, is known as special

4 Gideon Rose, "Generation Kill: A Conversation With Stanley McChrystal," *Foreign Affairs*, February 11, 2013, https://www.foreignaffairs.com/interviews/2013-02-11/generation-kill. A compilation of approximately 717 articles from *Special Warfare* magazine shows that in 103 available issues from 1990 to 2012, there were 16 articles about Direct Action, 103 articles on Unconventional Warfare and Foreign Internal Defense, and 100 articles on Civil Affairs, Psychological Operations (Military Information Support Operations). In contrast, of all these articles, a mere 16, or a little more than 2 percent, were on the subject of SR, and this total includes the subject of intelligence analysis. See *Special Warfare*, accessed December, 20, 2015, http://www.soc.mil/swcs/SWmag/archive.html.

5 Michael T. Flynn, Rich Juergens, and Thomas L. Cantrell, "Employing ISR: SOF Best Practices," *Joint Forces Quarterly* 50 (3d quarter 2008): 56–61; NATO, *Allied Joint Intelligence, Counter Intelligence and Security Doctrine*, AJP 2 (Brussels: NATO, July 2003), 1–1-1.

6 Flynn, Juergens, and Cantrell, "Employing ISR"; David J. Kilcullen, "Counter-Insurgency Redux," *Survival 48*, no. 4 (Winter 2006/2007), 113; Rupert Smith, *The Utility of Force* (London: Penguin Books, 2006), 327–29; Robert D. Steele, *The New Craft of Intelligence: Achieving Asymmetric Advantage in the Face of Nontraditional Threats* (San Bernardino, CA: Strategic Studies Institute, 2015), v.

surveillance and reconnaissance (SR) in doctrine.[7] SR is an SOF core activity and has always been an important part of the mission set.

Theories of special operations and theories of intelligence are vast and ambiguous. Intelligence scholar Peter Gill asserts there are "theories *of* intelligence and theories *for* intelligence."[8] In comparison, this thesis asserts there is a distinction between theories that support special operations in achieving their military purpose, and theories that explain what special operations are and the utility of this type of warfare, that is, theories *for* special operations and theories *of* special operations. If William H. McRaven's recognized principles and theory are *for* direct action, then what are the other principles and theories for SR, foreign internal defense, unconventional warfare and other SOF core activities and missions?[9] This thesis suggests an SR theory with principles *for* users of special operations. It would be valuable to improve the institution of SOF to explain further what factors promote or obstruct the execution of special operations, in this case, SR. Furthermore, human intelligence collection has been neglected compared with the development and application of more advanced technology collection capacities.[10] McRaven, among others, asserts that SOF's uniqueness is to provide a specific human aspect to the battlefield.[11] Certainly, this correlates with the SOF truth that "humans are more important than hardware."[12] This SOF truth will also be true when countries and forces do not have access to advanced technological intelligence collection

7 U.S. Department of the Army, *Special Operations*, ADRP 3–05 (Washington, DC: Headquarters, Department of the Army, August 2012), 2–6.

8 Peter Gill, "Theories of Intelligence," *in Intelligence Theory: Key Questions and Debates*, eds. Peter Gill, Stephen Marrin, and Mark Phythian (New York: Routledge, 2009), Kindle edition, 212.

9 The theory is used to describe direct action orientated operations like sabotage, raid, and rescues. William H. McRaven, *Spec Ops: Case Studies in Special Operations Warfare; Theory and Practice* (New York: Ballantine Books, 1996).

10 William H. McRaven, "Special Operations: The Perfect Grand Strategy," in *Force of Choice*, ed. Bernd Horn et al. (Kingston, Ontario: School Of Policy Studies, Queens University, 2004), 66–67, 73; Gabriel Margolis, "The Lack of HUMINT: A Recurring Intelligence Problem," *Global Security Studies* 4, no. 2, (Spring 2013): 43–60.

11 McRaven, "Special Operations: The Perfect Grand Strategy," 66; Anna Simons, "Seeing the Enemy (or Not)," in *Rethinking the Principles of War*, ed. Anthony D. McIvor (Annapolis, MD: Naval Institute Press, 2005), 334, 335, 339.

12 U.S. Army Special Operations Command, *SOF Truth*, accessed March 16, 2015, http://www.soc.mil/USASOCHQ/SOFTruths.html.

means. Alternatively, there may be a lack of certain collection platforms or simply not enough collection platforms, or air superiority may have not been established in the theater of operations.

In the future, SOF needs to be masters of both the "high-tech and the low-tech" to find and fix a specific target or to gain an understanding of the environment. SR will most likely continue to be an important part of the future SOF mission set.[13]

B. THE PROBLEM

The debate and the scientific study of special operations have partially become skewed because of a paradigm shift of SOF and the (over) reliance on technology. SR is a principal task and core activity for SOF, but there is not much open, public scientific research on SR.[14] And relevant SOF principles and theories are missing. The reasons for this include that the operations, actions, and methods are still classified. Also, certain security procedures still bind people from discussing operations. Moreover, the use of remotely piloted Intelligence Surveillance and Reconnaissance (ISR) platforms and other technologies are the focus of the collection debate. Dependence on technology has simply replaced "traditional" SR. Further, it may well be, that SR is seen as an integrated part of direct action today. However, this is not a useful view, since a direct action mission will not always follow an SR mission. In short, there is a risk that SOF is on a path to losing the art and science of SR.

The risk of inefficiency and misunderstanding of SOF can lead to the wrong employment of SOF when SOF conducts special intelligence gathering missions. Thus, personnel and methods can be exposed to avoidable risk to force, and risk of a possible mission failure. As an example of a new understanding, on today's battlefield, the level of detail has changed from counting tanks and fortifications to including details of biometrics, physical descriptions of individuals, and collecting computer data. In sum,

13 Kevin D. Stringer, "The Arctic Domain: A Narrow Niche for Joint Special Operations Forces," *Joint Force Quarterly* 78 (3rd Quarter 2015): 24–31.

14 As an example, *Special Warfare* magazine (published by JFK Special Warfare Center and School). In the three issues of regarding ARSOF 2022 (especially 2013 vol. 26 (page 11), and 2014 (vol. 27, pages 5–6), but also in 2015 (ARSOF next), SR is not mentioned in the conflict spectrum or mission set. See *Special Warfare*; Margolis, "The Lack of HUMINT: A Recurring Intelligence Problem," 43–60.

both practitioners and academics need increased ability to understand the specific nature and conditions of SR.

C. PURPOSE AND SCOPE

The purpose of this thesis is to identify SR-related principles and theory. More research in this field is necessary to improve the general and specific knowledge and explanations regarding the unique aspects of SOF and special operations, in this case, SR. The collecting unit and operations planners adhere to certain principles for SOF to take risks and successfully access and collect the information needed. The theory aims at lowering the uncertainty of a situation by gaining actionable intelligence. This threshold will support a decision maker's action, whatever that situation or target or decision may be. In addition, if there are SR principles to be recognized and confirmed, then other intelligence agencies and conventional units can benefit from this. They can consider the principles when conducting intelligence gathering.

This study has two audiences. The first audience is the SOF community. The second audience is planners, strategists, scholars, and joint and interagency staff. This thesis helps the audience to increase its general knowledge of SOF and contributes to the total body of knowledge on special operations, mainly, to give SOF better tools to succeed in the planning, preparation, and execution of SR missions. The research on special operations and SOF is widened and enlarged by an examination of past strike-related operations. Also, special operations and intelligence (collection) are closely related. This study can support a better understanding of both special operations as intelligence.

D. RESEARCH QUESTIONS

An assertion prefacing this research is this: if there were a theory and relevant principles of direct action missions, then there would be a specific theory and principles

for other SOF missions, as well.[15] This study aims to answer the questions: Are there certain principles for SR? If so, what are they, and can there be a related theory?

This thesis does not analyze collection through cyber or unmanned Intelligence Surveillance Reconnaissance (ISR) platforms, even though these collection platforms play an important part in the future battlefield. The use of SR principles in this particular context is outside the scope of this thesis. However, the principles subject for this thesis aim to be general. The study does not directly address decision theory. It does not analyze a risk-gain or cost-benefit analysis in detail that may or may not be necessary before a decision. Intelligence analysis and estimation is not the subject of this thesis. Intelligence analysis plays an important and necessary part in the development of intelligence. The collector needs to work intimately with the analyst for an intelligence product to be presented.

The thesis does not discuss the general intelligence processes in detail. However, SOF SR or intelligence may sometimes be the only source that can confirm or deny a target or answer a certain intelligence requirement. A single high-credibility intelligence report from SOF may be enough so that no more analysis is needed. This thesis does not discuss or analyze any planning process in detail. The study acknowledges that planning is an essential part of any military operation; however, this is beyond the scope of this thesis.

E. ORGANIZATION

The first chapter introduces the purpose, subject, background, the problem and the research questions. The second chapter explores previous research and doctrine of the fields of special operations and intelligence. The third chapter discusses the theoretical foundation of the thesis. The operationalized SR theory is a theory for the purpose of this study called relative certainty. Also, the chapter describes the approach, choice of research method and its advantages and disadvantages, and justification for the cases chosen for the thesis. The chapter builds a model to compare the principles and variables

15 An example of an existing theory with principles is William H. McRaven's theory. The theory is used to describe direct action–orientated operations like sabotage, raid, and rescues. See McRaven, *Spec Ops.*

subject to the analysis of the case studies. The fourth chapter examines two SR cases during the Falklands War in 1982. The fifth chapter examines the SR operation at the Inchon landing in 1950. The last chapter includes the findings, conclusion, proposals for future research and implication of policy, and a suggested theory *of* special operations.

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II. PREVIOUS RESEARCH AND THEORIES

A. INTRODUCTION

Public research directly related to SR is almost non-existent.[16] SR is placed as a core activity between the subjects of special operations and intelligence, which makes the research more complex. Organizations and countries have different definitions of SR.[17] According to NATO, *SR* can be defined as

> a human intelligence function that places "eyes on target" in hostile, denied, or politically sensitive territory. SOF may conduct these tasks unilaterally or in support of conventional operations. SOF may use advanced reconnaissance and surveillance techniques or equipment and/or sophisticated covert or discreet collection methods.[18]

U.S. Army SOF defines *SR* as

> reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces (JP 3-05) [Joint Publication, doctrine]. These actions provide an additive capability for commanders and supplement other conventional reconnaissance and surveillance actions. SR may include information on activities of an actual or potential enemy or secure data on the meteorological, hydrographic, or geographic characteristics of a particular area. SR may also include assessment of chemical, biological, residual nuclear, or environmental hazards in a denied area. SR includes target acquisition, area assessment, and poststrike reconnaissance.[19]

This chapter studies the academics and foundations on special operations, in particular SR principles. This examination also includes general intelligence theories and

16 Anders Westberg, "Special Reconnaissance and Surveillance: Emerging Theory and Principles for Accomplishing Successful Missions" (bachelor's thesis, Swedish National Defense College, 2014).

17 Sometimes SR is described as "Special Surveillance and Reconnaissance" or "Special Reconnaissance and Surveillance." In UK doctrine, SR is "Surveillance & Reconnaissance," and Direct Action is called "Offensive Action." UK SF conducts Support and Influence, not Military Assistance. There are also differences between the definition of SR explained in JP 3–05 and ADRP 3–05 (that is, U.S. DOD internal doctrine documents).

18 NATO, *Allied Joint Doctrine for Special Operations*, AJP-3.5(A), 3rd STUDY DRAFT, undated, 2–1.

19 U.S. Department of the Army, *Special Operations*, ADRP 3–05, 2–6.

principles. Appendix A in this thesis is a compilation of principles for SOF and Intelligence as discussed in this chapter.

B. SPECIAL OPERATIONS DOCTRINE, PRINCIPLES, AND THEORY

There is no unified academic theory of special operations, and most of the existing theories involve direct action, counterinsurgency, or unconventional warfare.[20] The United States conducts most of the research about SOF and special operations. Therefore, U.S. research and experiences broadly affect the doctrine and development of forces in other countries. Several scholars have developed theories on special operations and this unique warfare to increase the overall understanding of special operations compared with what doctrine states.

William H. McRaven developed a theory of special operations, and several thinkers and scholars use McRaven's theory as an example of special operations theory.[21] McRaven's purpose was to find a theory and principles for SOF to succeed in their mission, and the cases studied were only direct action–centric missions. McRaven argues that *relative superiority* is a condition where the inferior attacker in numbers (i.e., SOF) gains an upper hand over the enemy, who normally has a larger number of available troops and statically defensive disposition Gaining relative superiority means that SOF is overcoming von Clausewitz's frictions of war and the moral causes that play a part in a battle. McRaven asserts there are six essential principles, which play a significant part in determining whether special operations will succeed.[22]

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20 For instance, see Christopher Marsh, James Kiras, and Patricia Blocksome, "Special Operations Research: Out of the Shadows," *Special Operations Journal* 1, no. 1 (2015): 1–6. The Special Operations Research Association (SORA) was established in 2014 as a new non-profit enterprise. "[SORA is] dedicated to promoting research across academia, the military, and the SOF community on the nature, conduct, and sources of success of special operations. We are a group of scholars, educators, and military personnel (including present and former special operators) who share an interest in the field of special operations, ranging from theory to practice," accessed 10 December 2015, http://www.specopsjournal.org/home.html.

21 McRaven, *Spec Ops*, 2. Robert G. Spulak, Jr., *A Theory of Special Operations: The Origin, Qualities and Use of SOF*, JSOU Report 07–7 (Hurlburt Field, FL: JSOU, 2007), 4; James D. Kiras, *Special Operations and Strategy: From World War II to the War on Terrorism*, (London: Routledge, 2006), 1.

22 The six principles identified by McRaven are "Simplicity, Repetition, Security, Purpose, Speed, Surprise." See McRaven, *Spec Ops*, 8–23.

Military theorist Robert G. Spulak defines his theory as follows:

> Special operations are missions to accomplish strategic objectives where the use of conventional forces would create unacceptable risks due to Clausewitzian friction. Overcoming these risks requires special operations forces that directly address the ultimate sources of friction through qualities that are the result of the distribution of the attributes of SOF personnel.[23]

Moreover, according to Spulak,

> SOF are elite warriors, creative, and flexible. *Warriors* means that SOF are engaged directly in the fundamental nature of war and the implementation of strategy, destroying the enemy or creating his fear that he will be destroyed. *Creative* means that SOF can immediately change the combat process, altering the way in which the tension is accommodated between threatening or performing destruction and avoiding it. *Flexible* means that SOF units have a much larger range of capabilities and are more independent of other military forces than conventional units.[24]

The flexibility quality is important to this study since Spulak continues to expand on the uncertainty of the battlefield.

> SOF directly address this source of friction by having a wide range of capabilities to discover the "ground truth," including special reconnaissance, language and cultural knowledge, and a wide range of capabilities to apply to specific goals in the face of uncertainty. A small SOF unit can have a much larger range of capabilities than even a large conventional unit as a result of the smaller range of more capable personnel. The range of capabilities makes SOF more independent of other military forces in their operations.[25]

Furthermore, Spulak builds on McRaven's RS theory, and Spulak asserts three reasons for the need of a theory of special operations:

> a. Conventional wisdom sees a growing role for SOF. A theory can help effectively fight the current war on terrorism and address the future challenges to our security.

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23 Spulak, *A Theory of Special Operations*, 39.

24 Ibid., 39.

25 Ibid., 39–40.

> b. Special operations have always been discussed in terms of their potential and actual strategic impact, and a theory is needed for this strategic capability.
>
> c. A theory would be valuable to improve the institution of SOF by creating the ability to explain what institutional features (e.g., organization, doctrine, and use of technology) help or hinder the strategic uses of SOF.[26]

Furthermore, Spulak makes an interesting observation and argues that theories of SOF and special operations should be more or less indivisible.[27] He asserts that it is the inherent characteristics of SOF—"certain kind of access," "integrated operations," "unconventional operations," "strategic initiative," and "relative superiority"—that define SOF.[28]

Military strategist Harry R. Yarger continues to build on Spulak's theory and McRaven's principles.[29] Yarger asserts that "SOF's strategic performance represents a discernible and distinct form of military power—SOF power. As such, SOF power, like land, sea, and air power, is employable as a distinct instrument of power or as an integrated part of national military power and joint warfare."[30] He argues that

> special operations appear to succeed through adherence to a general set of principles particularly applicable to special operations. The better an understanding of these principles is integrated into the decision processes at all levels and the planning, rehearsal, and conduct of special operations, and the better they are adhered to, the greater the potential for mission and tactical, operational, and strategic success.[31]

Yarger suggests there are 14 principles for special operations when he combines the knowledge and research done by McRaven and Spulak as well as the special

26 Spulak, *A Theory of Special Operations*, 52.

27 Ibid., 21.

28 Ibid., 23.

29 Harry R. Yarger, *21st Century SOF: Toward an American Theory of Special Operations*, JSOU Report, no 13–1 (MacDill Air Force Base, FL: JSOU, 2013), 29.

30 Ibid., 18.

31 Ibid., 62.

operations doctrine with the conventional principles of war [battle].[32] Also, Yarger highlights 26 premises that apply to an American special operations' theory framework.[33]

Doctrine plays an important part for the military. Countries have over the years developed doctrines to explain the differences between SOF and special operations compared with conventional combat operations and units. For instance, the U.S. Department of Defense (DOD) has produced a doctrine in the Joint Publications Series and provides a view of "special operations, the employment, and support for SOF across the range of military operations."[34] The publications explain areas including command and control, core activities, organizations, support, and structure of USSOF.[35]
As a subset of the Joint Publication series, the Army Doctrine Reference Publication (ADRP) 3-05 Special Operations provides

> a broad understanding of Army special operations by describing how executing the two mutually supporting critical capabilities of special warfare, and surgical strike contributes to unified land operations. ADRP 3-05 provides a foundation for how the Army meets the joint force commander's needs by appropriate integration of Army special operations forces (ARSOF) and conventional forces.[36]

The ADRP describes the two critical capabilities in ARSOF, special warfare and surgical strike:

> Special warfare activities [are] executed by [Special Forces], Military Information Support (MISO, former Psychological operations), and CA [Civil Affairs] include UW [Unconventional Warfare], FID [Foreign Internal Defense], COIN [Counterinsurgency], stability operations, SR, and security force assistance (SFA). Surgical strike activities executed by the National Mission Force, Rangers, and Commanders' In-extremis

32 Ibid., 63–67; Also see Appendix A.

33 Ibid., 47.

34 U.S. Department of Defense, *Special Operations*, JP 3–05 (Washington, DC: U.S. Department of Defense, July, 2014), i.

35 U.S. Department of Defense, *Special Operations*; U.S. Department of Defense, *United States Special Operations Command Special Operations Forces Operating Concept* (Washington, DC: U.S. Department of Defense, May 2013).

36 U.S. Department of the Army, *Special Operations*, ADRP 3–05, Preface.

> Forces include CT [Counter Terrorism], hostage rescue and recovery, and combating WMD [Weapons of Mass Destruction].[37]

Besides, ADRP 3-05 describes the Army SOF imperatives, characteristics, and the core principles: discreet, precise, and scalable. The document also recognizes the "principles of war" or joint operations.[38]

Characteristics and the general use of SOF are described in doctrine as well in other publications.[39] Military scholars and thinkers have developed ideas and frameworks on the characteristics and utility of special operations and SOF. Military strategist Colin S. Gray asserts that SOF should mainly be employed as a guerrilla force in an unconventional warfare scenario.[40] Gray also states there is "a great deal of tactical doctrines for SOF, but virtually no relevant strategic theory or history."[41] Furthermore, Gray stresses that "the literature on special operations is deeply unsatisfactory. Most works on the subject are entirely uninterested in strategic relevance; instead they tend to offer adventurous narratives or anecdote of daring deeds, and colorful regimental histories."[42] And, he argues for strategy and special operations, there are two master claims and seven other claims that comprise the strategic utility of special operations. The master claims being "Economy of Force" and "Expansion of Choices."[43]

Military scholar James D. Kiras asserts that "the cumulative effect of numerous disparate special operations, working towards a common goal in conjunction with conventional forces, is the attrition of an adversary's key moral and material

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[37] Ibid., 1–6.

38 Ibid., 1–6.

39 U.S. Department of Defense, *SOCOM 2020: Forging the Tip of the Spear* (Washington, DC: U.S. Department of Defense, 2013), Foreword.

40 Colin S. Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999), 289.

41 Ibid., 290.

42 Ibid., 286.

43 Colin S. Gray, *Explorations in Strategy* (Westport, CT: Praeger Publishers, 1998), Kindle edition, Table 8.1, location 2493.

resources."[44] Decisively, Kiras affirms special operations' strategic utility in the role of direct action.[45]

Also, by using historical cases, other scholars have explained the uniqueness, roles, constraints, restraints, and different aspects of special operations, and why special operations fail or succeed.[46] However, SR operations are not directly addressed or analyzed in these cases or studies.

C. PRINCIPLES OF WAR AND PRINCIPLES AND THEORY OF INTELLIGENCE

The principles of war have been discussed for centuries to find a way to secure victory on the battlefield and to understand war and warfare.[47] Baron Antoine Henri de Jomini developed a foundation for the principles of war.[48] Jomini's principles have also served as the basis for developing sea and air warfare and strategy. Today, there are no universal and agreed upon principles of war, but the United States, as well as other countries, are using Jomini's principles and have developed them even further.[49] However, several scholars and military thinkers agree it is time to rethink the principles

44 Kiras, *Special Operations and Strategy*, 113.

45 Ibid., 34, 115–16.

46 Colin S. Gray, "Handfuls of Heroes on Desperate Ventures: When Do Special Operations Succeed?" *Parameters* (Spring 1999), 2–24, http://strategicstudiesinstitute.army.mil/pubs/parameters/Articles/99spring/gray.htm; David Tucker and Christopher J. Lamb, *United States Special Operations Forces* (New York: Columbia University Press, 2007); Lucien S. Vandenbrouke, *Perilous Option: Special Operations as an Instrument of U.S. Foreign Policy* (New York: Oxford University Press, 1993); McRaven, *Spec Ops*.

47 Steven Metz, Douglas C. Lovelace Jr., Douglas V. Johnson II, William T. Johnsen, James Kievit, "The Principles of War in the 21st Century: Strategic Considerations," *Strategic Studies Institute*, August 1995, accessed May 01, 2016, http://www.strategicstudiesinstitute.army.mil/pubs/summary.cfm?q=235; Also, John L Alger mentioned Sun Tzu's work *The Art of War* as the earliest fundamentals on the conduct of war followed by to include the Roman Vegetius and Niccolo Machiavelli. See John L.Alger *The Quest for Victory: The History of the Principles of War* (Westport, CT: Greenwood Press, 1982), 4-6.

48 Antoine Henri de Jomini, *The Art of War*, special ed. (El Paso, TX: El Paso Norte Press, 2005).

49 U.S. Department of Defense, *Joint Operations*, I-2. There are 12 principles of [war] joint operations: Objective, Offensive, Mass, Maneuver, Economy of Force, Unity of Command, Security, Surprise, Simplicity, Restraint, Perseverance, and Legitimacy.

of war as they are framed today, mainly because the principles of war (joint operations) can be considered as more as principles of (land) battle.[50]

An area closely related to intelligence is information warfare, or war in the information age. Robert R. Leonhard believes that there is a need to rethink the general principles of war. However, he argues that some of the present principles described in JP 3-0 can be used while some other principles need to be refined or ignored, in the war of the information age.[51] Again, these suggested principles are more directed toward conventional war or direct battle.

Edward Waltz has also studied information warfare and the information age.[52] His work is dived into two parts, Information Based Warfare and Information Operations for Information Warfare. One of the subchapters discusses principles of information superiority.[53] This is an interesting work with both direct and indirect relations to this thesis and research. He asserts there are four concepts that enable "information superiority": dominant maneuver, precision engagement, focused logistics, and full-dimension protection.[54]

Closely related to information superiority and the subject of information warfare is information dominance. John Arquilla describes information dominance as "knowing everything about an adversary while keeping the adversary from knowing much about oneself."[55] Normally, information becomes intelligence after it has been processed,

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50 Antony D. McIvor, ed., *Rethinking the Principles of War* (Annapolis, MD: Naval Institute Press, 2005); Brian B. Ettrich, "The Principles of War: Are They Still Applicable?" (master's thesis, Naval Postgraduate School, 2005).

51 Robert R. Leonhard, *The Principles of War for the Information Age* (New York: Ballantine Books, 1998). There are three main principles (Principles of Aggression, Principle of Interaction, Principles of Control), and six subprinciples.

52 Edward Waltz, *Information Warfare: Principles and Operations* (Norwood, MA: Artech House, 1998).

53 Ibid., 108–13.

54 Ibid., 108–9.

55 John Arquilla, "The Strategic Implications of Information Dominance," *Strategic Review* 22, no. 3 (Summer 1994): 25. First introduced by John Arquilla and David Ronfeldt, "Cyberwar Is Coming!" *Comparative Strategy* 12, no. 2 (Spring 1993): 141–65.

validated, and analyzed. In the field of intelligence, the readings in this particular area are vast and diverse.

1. Intelligence Theory and Principles

The research about intelligence is broad, and the intelligence debate normally includes the nation-state(s) and intelligence, indications and warning, threats, management and mandate, processes and analysis.[56] However, a unified theory of intelligence is missing. A RAND seminar discussed the lack of an intelligence theory. However, the topic is so diverse that one of the conclusions reached during the seminar was that

> the range of views among participants suggests why, even among those who might agree on the need for intelligence reform or "revolutionary change," it is hard to agree on a course or even courses of action. While many observers can list current problems, the divergence of their views over the very essence of intelligence hampers agreement on what is essentially wrong, how it can be changed, and whether changing it will make any significant difference in national security outcomes.[57]

James Cox also confirms this diversity. He uses the RAND study as a departure point for his assertion. Cox asserts that there is "one fundamental form of intelligence and that therefore only one theoretical framework is required to house any overarching

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[56] Robert L. Jervis, *Why Intelligence Fails: Lessons from the Iranian Revolution and the Iraq War* (New York: Cornell University Press, 2010); William E. Odom, *Fixing Intelligence: For a More Secure America* (New Haven, CT: Yale University Press, 2003); McIvor, *Rethinking the Principles of War*; Abram N. Shulsky and Gary J. Schmitt, *Silent Warfare: Understanding the World of Intelligence*, 3rd ed. (Dulles, VA: Brassey's, 2003); G.J. David, Jr., and T.R. McKeldin III, *Ideas as Weapons: Influence and Perception in Modern Warfare* (Washington, DC: Potomac Books, 2009); Bruce D. Berkowitz and Alan E. Goodman, *Best Truth: Intelligence in the Information Age* (New Haven, CT: Yale University Press, 2000); Michael I. Handel, ed., *Intelligence and Military Operations* (Abingdon, England: Frank Cass & Co., 1990); Peter Gill and Mark Phythian, *Intelligence in an Insecure World* (Cambridge: Polity Press, 2006); Mark M. Lowenthal, *Intelligence: From Secrets to Policy*, 5th ed. (Thousand Oaks, CA: CQ Press College, 2011); Loch K. Johnson (ed.), *Essentials of Strategic Intelligence* (Santa Barbara, CA: Praeger, 2015); Richard K. Betts, *Enemies of Intelligence: Knowledge & Power in American National Security* (New York: Columbia University Press, 2007); Richard K. Betts and Thomas G. Mahnken, eds., *Paradoxes of Strategic Intelligence: Essays in Honor of Michael I. Handel* (London: Frank Cass Publishers, Taylor & Francis, 2001), Kindle edition.

57 Gregory F. Treverton, Seth G. Jones, Steven Boraz, and Phillip Lipscy, *Toward a Theory of Intelligence: Workshop Seminar Report* (Santa Monica, CA: RAND Corporation, 2006), http://www.rand.org/content/dam/rand/pubs/conf_proceedings/2006/RAND_CF219.pdf.

theory."[58] Cox has developed a comprehensive model of intelligence consisting of several domains, and depicted vertical, horizontal and with a depth. He includes that artificial intelligence and military intelligence will be subordinate to what he calls "collective intelligence."[59] Loch K. Johnson and James J. Wirtz have collected several articles and essays from prominent scholars. This comprehensive work includes the intelligence disciplines, intelligence analysis, intelligence and policy, covert action, counterintelligence, intelligence after 9/11 and intelligence failures, and the descriptions of other countries' intelligence services.[60]

A similar comprehensive work of intelligence essays is published by Peter Gill and others.[61] This work also takes the starting point in the RAND workshop and continues to expand from that seminar. The focus is a discussion of theories of (military) intelligence, including the intelligence cycle, counterintelligence, covert action, and intelligence oversight. For instance, David Kahn mentions that there are three principles of intelligence; "it optimizes resources, it is an auxiliary function in war, and it is essential to the defense, but not to the offense."[62] The first two principles are attractive to this study. They are related to SR theory in the way that it supports decision making and developing actionable intelligence. The third principle relates to Kahn's study of several battles, where the common denominator for victories in the battle for the defensive side was intelligence. However, it was not so on the offensive side.[63]

58 James Cox, *A Theoretical Framework for Intelligence*, 1, accessed February 27, 2016. http://www.cmia-acrm.ca/ACADEMIC/Cox_1501.pdf.

59 Ibid., 5–8, Appendix 4.

60 Loch K. Johnson and James J. Wirtz, eds., *Intelligence: The Secret World of Spies, an Anthology* (Oxford: Oxford University Press, 2015), 4th edition.

61 Peter Gill, Stephen Marrin, and Mark Phythian, eds., *Intelligence Theory: Key Questions and Debates* (New York: Routledge, 2009), Kindle edition.

62 David Kahn, "An (sic) Historical Theory of Intelligence," in *Intelligence Theory: Key Questions and Debates*, eds. Peter Gill, Stephen Marrin, and Mark Phythian (New York: Routledge, 2009), Kindle edition, 10.

63 Ibid., 9.

Furthermore, the academic debate and readings include fusion, processes, and the intelligence discipline's advantages and disadvantages.[64] David Tucker discusses the importance and relevance of intelligence in war and the information age, and he compares and contrasts different views of intelligence. His studies are from grand strategic level to the tactical level. He looks into the effects that "neo-Clausewitzian" views, Sun Tzu's philosophies, and the Revolution in Military Affairs (RMA) have had and will have on future wars, including irregular wars. A main theme in the discussion is the importance of being able to reduce uncertainty in warfare.[65] Tucker also discusses the difference between regular combat operations and special operations and intelligence by building on McRaven's principles and theory.

Robert Clark and Mark Lowenthal have recently published works about intelligence collection and focus on the roles, processes, strengths, and weaknesses of the intelligence disciplines.[66] Also, Wayne Michael Hall and Gary Citrenbaum have developed ideas about conventional forces' intelligence collection, in particular, in counterinsurgency.[67] Hall and Citrenbaum have developed 15 principles for intelligence gathering. The principles are

- combinations and optimum mixes,
- indirect approaches,

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64 U.S. Department of Defense, *Joint Intelligence*, JP 2–0 (Washington, DC: U.S. Department of Defense, October 2013); NATO, *Allied Joint Intelligence, Counter Intelligence and Security Doctrine*, AJP 2 (Brussels: NATO, July 2003); U.S. Department of the Army, *Intelligence*, ADRP 2–0 (Washington, DC: Headquarters, Department of the Army, August 2012); McIvor, *Rethinking the Principles of War*; Shulsky and Schmitt, *Silent Warfare*; G.J David, Jr., and T.R McKeldin III, *Ideas as Weapons: Influence and Perception in Modern Warfare* (Washington, DC: Potomac Books, 2009); Henry A. Crumpton, *The Art of Intelligence: Lessons from a Life in the CIA's Clandestine Service* (New York: Penguin Press, 2012), Kindle edition; Michael T. Flynn, Matt Pottinger, and Paul D. Batchelor, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan* (Washington, DC: Center for a New American Security, January 2010), http://www.cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf.

65 David Tucker, *The End of Intelligence: Espionage and State Power in the Information Age* (Stanford, CA: Stanford University Press, 2014).

66 Robert M. Clark, *Intelligence Collection* (Thousand Oaks, CA: CQ Press College, 2013), Kindle edition; Mark M. Lowenthal and Robert M. Clark, *The Five Disciplines of Intelligence Collection* (Thousand Oaks, CA: CQ Press College, 2015).

67 Wayne Michael Hall and Gary Citrenbaum, *Intelligence Collection: How to Plan and Execute Intelligence Collection in Complex Environments* (Westport, CT: Praeger, 2012), Kindle edition, location 256, 1843, 2071, 2196.

- commander's feedback loop,
- think like the adversary,
- agility,
- human collectors,
- meet standards,
- collect on aggregates and complex adaptive systems,
- collection synergy,
- analysts provide focus,
- mass and maneuver,
- collection condition settings,
- [collection on] intangible outcomes,
- power of the observer, and
- collect on decay.[68]

The concept is developed for conventional units and directed toward contemporary information methods such as social networks and ISR (Intelligence Surveillance Reconnaissance, a synonym to UAV [Unmanned Aerial Vehicle]) but also *low-level* human intelligence.[69] However, there is no "theory" supported by the principles.

On doctrine, the military at the strategic and operational level have Joint Publications. One such publication suggests that there are ten principles for Joint Intelligence. The principles are

- perspective (think like the adversary),
- synchronization (synchronize intelligence with plans and operations),
- integrity (remain intellectually honest),
- unity of effort (cooperate to achieve a common end state),

68 Ibid., loc. 9038

69 Ibid., loc. 1843, 2071, 2196.

- prioritization (prioritize requirements based on commander's guidance),
- excellence (strive to achieve the highest standards of quality),
- prediction (accept the risk of predicting adversary intentions),
- agility (remain flexible and adapt to changing situations),
- collaboration (leverage expertise of diverse analytic resources), [and]
- fusion (exploit all sources of information and intelligence).[70]

Furthermore, on the tactical levels, there are field manuals and handbooks. The documents include doctrinal guidance, structure, support, processes, capabilities and limits, techniques, and procedures.[71] ADRP 2-0 mentions the characteristics of effective intelligence: accuracy, timeliness, usability, completeness, precision, reliability, and three additional criteria that require effective intelligence to be relevant, predictive and tailored.[72] Arguably, these characteristics are inherently found in SOF intelligence and SR.

In sum, the research on intelligence is vast and diverse, and relevant documents mostly revolve around the intelligence disciplines, strengths, and weaknesses. Most doctrine is directed toward conventional units and the analysis component of intelligence.

2. Effects on Special Reconnaissance and Surveillance

In general, SOF intelligence collection serves two purposes, developing actionable intelligence for follow-on actions such as raids, sabotage or rescues, and collecting information to develop the situation or improve the intelligence situation for a specific target or area.

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70 U.S. Department of Defense, *Joint Intelligence*, II-1.

71 U.S. Department of the Army, *Human Intelligence Collector Operations*, FM 2–22.3/FM 34–52 (Washington, DC: Headquarters, Department of the Army, 2006); U.S. Department of the Army, *U.S. Army Reconnaissance and Surveillance Handbook* (Washington, DC: Headquarters, Department of the Army, 2004); U.S. Department of the Army, *Ranger Handbook*, SH 21–76 (Fort Benning, GA: Ranger Training Brigade, United States Army Infantry School, 2011); U.S. Department of the Army, *Special Operations Forces*, FM 3–05.20 (Washington, DC: Headquarters, Department of the Army, 2001); U.S. Department of the Army, *Army Special Operations Forces Intelligence*, FM 3–05.102 (Washington, DC: Headquarters, Department of the Army, 2001).

72 U.S. Department of the Army, *Intelligence*, 2–1–2-2.

Normally, the available research and the current debate on the (strategic) utility of special operations focuses on the direct action and unconventional warfare roles and missions.[73] The rapid evolution of technology has developed new intelligence capabilities and techniques. The experience of the theaters of war in the last decade have resulted in improved knowledge, understanding, and use of planning processes and technology. Operations and Intelligence roles, branches, and staffs are working more closely together in a fusion environment.[74] The details and intelligence available today are greater than ever before.[75] Thus, the foundation for decision making has changed.

However, there are signs of a paradox. It has become more difficult to make a quick decision on a course of action, despite the availability of information.[76] There is a tendency to want even more information but a reluctance to make decisions. For instance, General (ret.) Stanley McChrystal asserts, "Commanders typically delay decisions while asking for more information. They're trying to get more intelligence so they can mitigate the risk to their decision. And of course, in combat, delaying the decision carries a great price."[77] Hall and Citrenbaum stress that "each commander making decisions always comes to two essential elements of any decision—*managing the risk* and *attempting to lower the uncertainty*."[78]

The debate about the area of intelligence focuses on and includes the national and strategic level (that is, intelligence services), indications and warning, processes, turf war,

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73 Kiras, *Special Operations and Strategy*; Gray, *Modern Strategy*; Anna Simons, ed., *SOF 2030: An NPS Defense Analysis Seminar Report* (Monterey, CA: Naval Postgraduate School, March 2012), http://www.nps.edu/Academics/Schools/GSOIS/Departments/DA/Documents/SOF%202030.pdf .

74 Flynn, Juergens, and Cantrell, "Employing ISR"; Spencer Ackerman, "How Special Ops Copied Al-Qaida to Kill It," *Wired*, September 9, 2011, http://www.wired.com/2011/09/mcchrystal-network/all/1.

75 Smith, *The Utility of Force*, 323.

76 An example is control, in particular, the process of concept of operations approval for missions to be executed. Thomas Doherty, "Failing to Plan is Planning to Fail: When CONOPs Replace OPORDs," *Small Wars Journal*, August 28, 2012, http://smallwarsjournal.com/jrnl/art/failing-to-plan-is-planning-to-fail-when-conops-replace-opords.

77 Cited in Lillian Cunningham, "Stanley McChrystal on How to Shake Up the Military," *Washington Post*, May 15, 2015, https://www.washingtonpost.com/news/on-leadership/wp/2015/05/15/gen-stanley-mcchrystal-on-shaking-up-the-military/.

78 Hall and Citrenbaum, *Intelligence Collection*, location 3596.

and countering new threats, rather than theories and principles. On the lower tactical level, there are field manuals and handbooks, which concern methods, processes, and procedures. There is a new SR manual, but it is not publicly available even if it is not classified.[79] Conventional doctrines and field manuals are comprehensive and generalizing but do not provide any direct theorizing on SR.[80] In short, SR as a core activity has been neglected compared with the technological evolution and the development of other core activities during the last decade.

Besides, when is a mission considered to be "special" reconnaissance rather than just reconnaissance conducted by conventional or general purpose forces? Alternatively, is SOF the right tool to use for the collection? Normally, an SR mission is considered to be in the realm of human intelligence. However, it would not be suitable to exclude other and more advanced methods or technology (for instance, the use of small airborne ISR assets). If a mission is not directly human intelligence, an SOF operator may enable the collection, as with, for example, the placement of a camouflaged remote-controlled camera. Dick Couch mentions that "SR as practice in special operations could well serve a conventional R&S (Reconnaissance & Surveillance] role, but it is an enhanced capability for strategic, politically sensitive, intelligence-related or evidentiary requirements."[81]

As indicated by McRaven and others, SR is a core activity, and SOF can fill a capacity void using advanced abilities to collect and process a multisource intelligence

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79 U.S. Department of the Army, *Special Forces Special Reconnaissance*, ATP 3–18.4 (Washington, DC: Headquarters, Department of the Army, August 18, 2015).

80 U.S. Department of the Army, *Commander and Staff Organization and Operations*, FM 6–0 (Washington, DC: Headquarters, Department of the Army, May 2014); U.S. Department of the Army, *Intelligence*; U.S. Department of the Army, *Special Operations*, ADRP 3–05; U.S. Department of the Army, *U.S. Army Intelligence and Interrogation Handbook* (New York: Skyhorse Publishing, 2006); U.S. Department of the Army, *Human Intelligence Collector Operations*; U.S. Department of the Army, *Special Operations Forces*; U.S. Department of the Army, *Army Special Operations Forces Intelligence*; U.S. Department of the Army, *Ranger Handbook*, SH 21–76 (Fort Benning, GA: Books Express Publishing, 2011); U.S. Department of the Army, *U.S. Army Reconnaissance and Surveillance Handbook*; U.S. Department of the Army, *Long Range Surveillance Units Operations*, FM 3–55.93 (Washington, DC: Headquarters, Department of the Army, 2009).

81 Dick Couch, *Always Faithful, Always Forward: The Forging of a Special Operations Marine* (New York: Berkley Publishing Group, 2014), 162. R&S is a "standard battle tactics" and in this context refers to "intelligence gathering in preparation for … immediate military action, such as a conventional ground assault" (p. 162).

report from one small intelligence gathering unit. This unit has unique access, in particular, in the human domain.[82] Furthermore, special operations are innately "joint" from the tactical level and up. SOF is also familiar with working in an interagency environment. SR missions are usually conducted beyond the organic capabilities of conventional commanders, and when there is a lack of intelligence resources from other services and national intelligence assets.[83]

A couple of more important questions to ask are, what intelligence gaps, or intelligence requirements need an answer and can the intelligence be collected by other means than SOF? Also, does the requirement need to be complemented with SOF collection, normally termed "eyes on the target?" Furthermore, one should also consider the need for covert, clandestine, discreet, or overt collection. Usually, a special operations can be considered if the SOF unit is commanded from the highest possible level, has access to national intelligence, is involved early in the planning, and considers certain security procedures, and if the mission is directed on a target of operational or even of strategic importance.[84] Also, the threat and the terrain of the operational environments have to be considered.

Usually, the proper decision to select SOF for collecting information should be based on SOF training, not only in specific collections methods or cultural expertise and languages, but also in combat abilities. Additionally, SOF can perform independently in small teams and hold a variation of infiltration and exfiltration skills not found in general purpose forces. Because of these characteristics, SOF can usually take higher risks than conventional forces and, as Spulak mentions, create certain access to the information.[85] After all these

82 McRaven, "Special Operations," 73; U.S. Department of Defense, *United States Special Operations Command Special Operations Forces Operating Concept*.

83 U.S. Department of Defense, *Special Operations*; U.S. Department of Defense, *United States Special Operations Command Special Operations Forces Operating Concept, (May 2013);* U.S. Department of the Army, *Special Operations*; NATO, *Allied Joint Doctrine for Special Operations.*

84 U.S. Department of Defense, *Special Operations*; U.S. Department of Defense *United States Special Operations Command Special Operations Forces Operating Concept*, (May 2013); U.S. Department of the Army, *Special Operations*, ADP 3–05 (Washington, DC: Headquarters, Department of the Army, August 2012); U.S. Department of the Army. *Special Operations*, ADRP 3–05; NATO, *Allied Joint Doctrine for Special Operations*.

85 Spulak, *A Theory of Special Operations*, 52.

considerations are made, the methods and tactics for collecting information can be decided on, whether through the use of static or mobile methods, recruited sources, cyber or ISR, or a combination thereof. It depends on the purpose of the operations, the intelligence requirement, available time and means, and the risks involved.

D. CONCLUSIONS

One may distinguish between theories that support special operations in achieving the objective and theories explaining what special operations are, that is, theories *for* special operations and theories *of* special operations. However, a unified theory *for* special operations is yet to be agreed upon. Maybe because of the diversity on the subject, this will not happen. Nonetheless, special operations need certain principles and theory, as clearly suggested by Spulak and Gray, and others. An SR theory and principles would be valuable to improving the SOF institution, and creating the ability to explain and complement existing principles and theories to explain the uniqueness of SOF, and make the best use of special operations.

In general, intelligence should be timely. Intelligence activities are time-consuming, and time plays critical part in all intelligence processes. Simply, it takes time to plan, direct, collect, process, analyze, and disseminate intelligence on the enemy. It is much easier and faster to develop an estimate on one's own forces and course of action, than an estimate about the enemy's course of action. Of note, SOF can be considered to be both consumers as well as providers of intelligence. Also, special operations and intelligence are two areas that are relatively abstract for a bystander, and this is the bridge SR is trying to close. SOF has various collection methods and techniques and infiltration skills. These abilities allow SOF to gain access to a target or target area to answer the intelligence requirement and succeed. Therefore, employment in a high-risk and undetermined environment is suitable task for SOF. SOF can collect the information to provide timely intelligence for decision makers, and by so doing, lower the uncertainty surrounding a situation or a target. The circumstance can be depicted as a gap that this thesis aims to fill with the SR theory and principles. With this foundation, the thesis now turns to the SR theory and approach chapter for further exploration.

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III. THEORY OF SPECIAL RECONNAISSANCE AND SURVEILLANCE

A. THE FOUNDATION OF AN SR THEORY

The core of intelligence theory is the intelligence cycle.[86] In broad terms, this is planning and direction, collection, processing and analyzing, and dissemination. There are several methods and intelligence disciplines to collect information.

1. Introduction

One of these methods is the use of SOF performing SR, and the suggested theory of SR is developed for this research. The SR theory reflects the relationship of certainty and time and the role SOF collection units play reducing *uncertainty*. This chapter examines the SR-related principles during the phases of planning, preparation, and execution. The principles are needed to achieve a condition termed *relative certainty.* The SR theory honors the direct action principles of simplicity, security, repetition, and purpose. However, the SR concept also integrates some new principles. The focus of the chapter concerns first the principles not related to direct action such as *coordination*, *review*, *cover*, *reporting*, and *exploitation.*

B. SR THEORY

Uncertainty is a characteristic of the battlefield environment and war both today and in the future. Spulak, Hall and Citrenbaum, Tucker, and doctrinal documents indicate uncertainty is ever-present. Overcoming the uncertainty in war is important.[87] Conversely, one wants to be as *certain* as possible about a specific target or situation. It is

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[86] Mark Phythian, "Intelligence Theory and Theories of International Relations," in *Intelligence Theory: Key Questions and Debates*, eds. Peter Gill, Stephen Marrin, and Mark Phythian (Abingdon, England: Routledge, 2009), 56.

[87] Spulak refers to Barry D. Watts, *Clausewitzian Friction and Future War*, McNair Paper 68 (Washington, DC: National Defense University, 2004), rev. ed., in "A Theory of Special Operations," 7–9, 20. Hall and Citrenbaum, *Intelligence Collection,* location 3596. Tucker, *End of Intelligence*; U.S. Department of Defense, *Joint Operations*, ix, I-2, II-4, II-5; U.S. Department of the Army, *Commander and Staff Organization and Operations,* 3–2, 11–2, 11–3; U.S. Department of the Army, *Special Operations*, ADRP 3–05, 1–15; U.S. Department of the Army, *Mission Command*, ADRP 6–0 (Washington, DC: Headquarters, Department of the Army, May 2012), 1–2, 2–5.

the task of intelligence collection as well as analysis to reduce the uncertainty including the enemy and target. McRaven's condition of relative superiority applies to direct action. McRaven's model and a graph of relative superiority help to explain how and when this particular condition occurred. This analysis can be accomplished after a mission is complete.[88]

This study asserts that SR has a certain condition that, for the development of the theory, is termed *relative certainty*.[89] *Relative certainty* is the threshold where there is enough information about a certain target that one can act (see Figure 1). This threshold also applies to actionable intelligence. It is intelligence with a high level of resolution and detail on the enemy or target. Therefore, a decision maker can decide *to act* or *not to act* on the intelligence presented.

The theory and relationship are a function of *certainty* (*knowledge*) and *time* of a specific target or target set and even a certain situation. It all depends on the purpose for employing SOF. Usually, SR is directed to develop intelligence on a target of high-value. This action comes, normally, after the targeting process is complete, and intelligence resources are allocated and targets need further refinement. On the y-axis, the level of certainty, low to high, is depicted (see Figure 1). That is, how much information does the organization have to include a certain event, object, targets, or a specific situation? The x-axis depicts the time. Time refers to minutes, hours, days, weeks, months, or years. Also, time can be phased. For instance, on today's battlefield, the find, fix, finish, exploit, analyze, and disseminate (F3EAD) methodology is used.[90] Furthermore, this study asserts that there are logical consecutive intelligence phases. These phases include situational awareness, intelligence development, target development, target refinement and developing or setting conditions for follow-on operations or decisions (see Figure 1). If an organization does not pay attention to a certain target or continue to develop

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[88] McRaven, *Spec Ops*, 4–8.

[89] The actual term *Relative Certainty* in this context is credited to Steve Dayspring, Subject Matter Expert meeting held at the Naval Postgraduate School on October 22, 2015.

[90] Charles Faint and Michael Harris, "F3EAD: Ops/Intel Fusion 'Feeds' the SOF Targeting Process," *Small Wars Journal*, January 31, 2012, http://smallwarsjournal.com/jrnl/art/f3ead-opsintel-fusion-%E2%80%9Cfeeds%E2%80%9D-the-sof-targeting-process.

intelligence *relative certainty* can diminish over time and the organization needs to start collect intelligence again.

In the general context of special operations, direct precision, and short-term targeting, relative certainty is not like the entire notion of Waltz's "information superiority" or Arquilla's "information dominance."[91] Their notions can, however, be related just for a short time. Relative certainty opposes absolute certainty since it is hard to gain *absolute* certainty and confirmation until after the fact. Bart Whaley and Jeffrey Busby comment on decision making in uncertainty, "We seldom enjoy the luxury of having 100 percent or even 80 or 90 percent of the relevant information."[92] This is, in particular, true on today's complex battlefield with the possibility of the adversary using a variety of deception techniques. The gap between available, but inadequate, intelligence and the wanted threshold of relative certainty can present a decision maker with a problem, especially if there is not enough intelligence but time or other considerations do not allow further collection efforts. Therefore, this particular decision can involve a cost-benefit or risk-gain reflection.

Economist Frank H. Knight suggests, "There is a fundamental distinction between the reward [benefit or gain] for taking a known risk and that for assuming a risk whose value itself is not known."[93] He also suggests a division of risk and uncertainty; "proper" risk is known and can be calculated, while uncertainty is unpredictable.[94] Knight mentions that economical businesses use insurance to manage the risk or uncertainty.[95] With this observation and in the theory of this research, SOF is the insurer. Well-employed SR that is a planned, prepared and trained SR unit directed against and creating access to a target of high value without compromising the mission or intent reduces risk

91 Waltz, *Information Warfare;* Arquilla, "Strategic Implications of Information Dominance."

92 Barton Whaley and Jeffrey Busby, "Detecting Deception: Practice, Practitioners, and Theory," in *Strategic Denial and Deception: The Twenty-First Century Challenge*, eds. Roy Godson and James J. Wirtz, 7th ed. (Piscataway, NJ: Transaction Publishers, 2009), 193.

93 Frank H. Knight, *Risk, Uncertainty and Profit* (Boston: Houghton Mifflin, 1921), Kindle edition, location 961.

94 Ibid., location 440.

95 Ibid., location 1010.

as well as uncertainty. Also, risk in this context and theory are the relations of a "threat" and the probability that this threat will occur. If a decision maker accepts the risk, *much below the relative certainty threshold*, and decides to take action, then he or she understands that the expected value or gain (benefit) is worth more than the total cost and presumptive negative consequences (see Figure 1). It depends on what is at stake. However, relative certainty supports the decision maker in managing the risk to a certain degree since this study agrees with Whaley and Busby that 100 percent relevant information is unattainable.

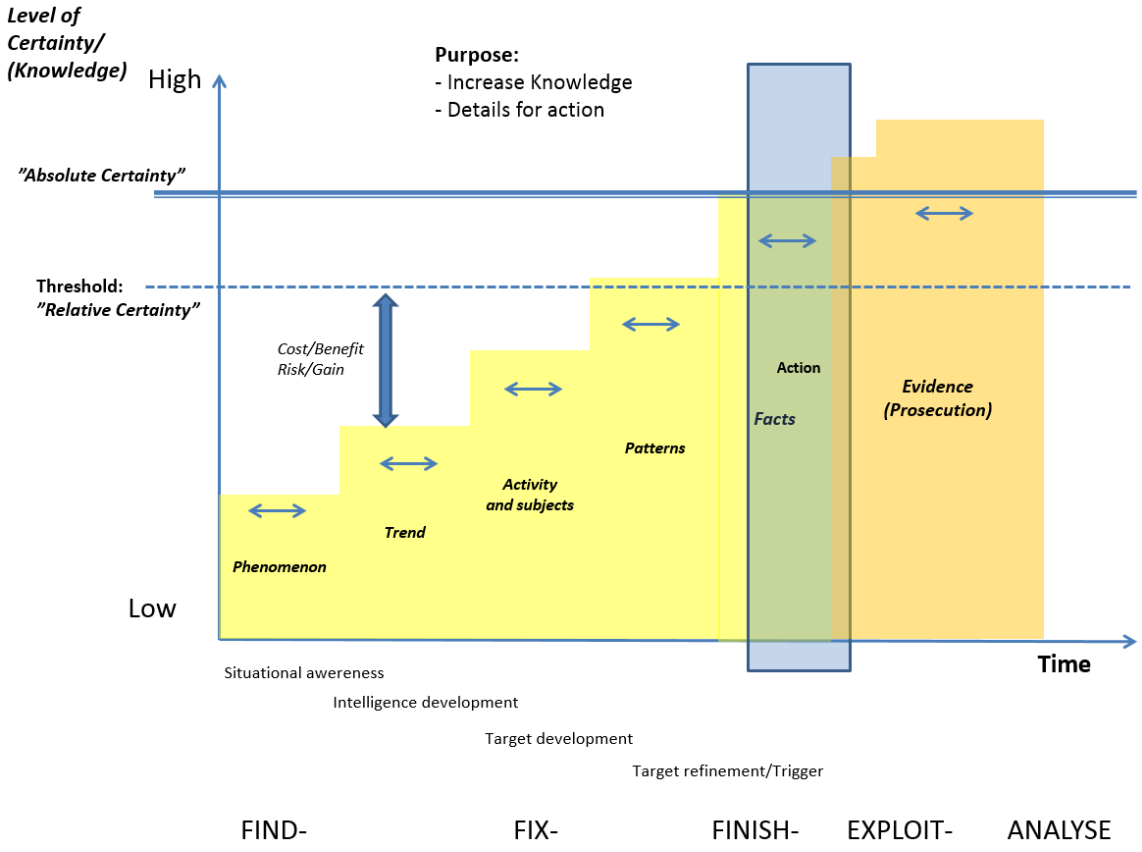

Figure 1. A Suggested Theory of Special Reconnaissance and Surveillance[96]

96 Adapted from Niki Ekman. The notion of the phenomenon and trend [originally followed by "modus"] are credited to Niki Ekman. However, her graph and idea were in a context of sheer analytical efforts and resources on the y-axis and in an inverted relationship to an undefined timespan. Presented at a strategic criminal intelligence symposium, Stockholm, November 2005.

Depending on the outcome, relative certainty sustains over time until the mission is over or a follow-on action is completed, or simply new information becomes available. Then the threshold is no longer valid. Relative certainty supports the decision maker just for a period of time. And as Whaley and Busby continue to explain, "At some point we must decide to make a judgment and take action. Some kind of cost-benefit assessment, whether mathematically precise or just rough-and-ready, can help decide the action point."[97] As this study asserts, the decision threshold to take action is the condition of relative certainty.

This notion of uncertainty resonates with ADRP 2-0 *Intelligence*: "Commanders' considerations for the intelligence warfighting function include—Reducing operational uncertainty. Intelligence does not eliminate uncertainty entirely. Commanders determine prudent risks inherent in any operation."[98] In short, a decision maker has made a conscious and informed decision with a cost-benefit or risk-gain analysis supporting that decision. Moreover, a decision maker normally needs information, not only about the enemy but also on the friendly organization, status, and course of action to reach a decision point.[99] To a smaller scale, in this study's context, it applies to John Arquilla's notion of an information strategist's skills of "understanding the kind of knowledge that needs to be created [and] managing and properly distributing one's own information flow."[100] Usually, an organization has an updated knowledge and understanding of its organization, and therefore, the time to gather the information is swift compared with information of the enemy.

In the ideal world allocated intelligence resources and time will develop a target or a situation and the organization gain a complete understandning. However, as

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[97] Whaley and Busby, "Detecting Deception," 193.

[98] U.S. Department of the Army, *Intelligence*, ADRP 2–0 (Washington, DC: Headquarters, Department of the Army, August 2012).

[99] Normally this can, in general terms, be codified as Priority Intelligence Requirements (PIR) and Friendly Forces Intelligence Requirements (FFIR) that constitute Commanders Critical Information Requirements (CCIR) and subsequent decision point (DP). U.S. Department of the Army, *Commander and Staff Organization and Operations*, 3–7.

[100] John Arquilla, "Thinking about Information Strategy," in *Information Strategy and Warfare: A Guide to Theory and Practice*, eds. John Arquilla and Douglas A. Borer (New York: Routledge, 2007), 1.

mentioned, this may not be true. Nonetheless, the theory begins with some information, followed by developing the information into intelligence, and finally confirming it as facts or evidence since intelligence and evidence are not necessarily one and the same. Regularly, an organization starts with an information shortfall on an event, situation, target, or area. Usually, there is a "phenomenon" that attracts the attention. Alternatively, an organization does not know enough about a target or target set. This phenomenon could be a starting point for a collection. The organization directs, therefore, more resources, including collectors and analysts in this phase. A clear and identifiable starting point for the collection is important. The starting point could be a name, time, place, or an event. Identifiable starting point(s) for the collection is necessary for any collector. In particular, this is important to SOF; otherwise, efforts to employ SOF can be inadequate and a waste of time and resources.

Of note, the evidence is confirmed facts and for all intents and purposes, it must be of such detail that it can be presented and used in a court of law. The absolute certainty threshold depicts this part (see Figure 1). In an investigation, where more evidence can be collected and used increases the certainty. Depending on the purpose of the collection, in theory, relative certainty and absolute certainty can be one and the same. However, in practice on today's battlefields, this is not the norm. Over time, trends and patterns will emerge as more information is collected and processed. Ultimately, depending on the purpose of the focus and direction of the intelligence operation, details of the targets, objects and activities can be distinguished (see Figure 1). Eventually, there is intelligence assumed sufficient to justify action and employ SOF to enter the finish phase. The decision can also be not to act. It depends on the purpose of the mission, and whether SOF, in this place, answered the intelligence requirements. In other words, in theory the more dedicated intelligence resources and time are used on a target, the more will the organization know.

The SR theory applies to Edward Waltz's assertion of "information superiority."[101] However, the SR theory is more discriminating and focused on the

101 Waltz, *Information Warfare*, 108–9.

precision part of his concept of "Dominant battlespace awareness and knowledge."[102] In the National Security Agency/Central Security Service's strategic plan, upon which Waltz bases his arguments, this awareness and knowledge are described as "comprehensive awareness of all the decision-relevant elements within a defined battlespace, and the ability to predict, with very high confidence, near-term enemy actions and combat outcomes."[103]

This research has studied cases that were a direct action or intervention followed. Developing actionable intelligence related to a target or target set is one way of SOF intelligence and SR utility. However, the thesis also asserts that the other main purpose of SOF SR is to develop a situational awareness leading to further intelligence development. This situational awareness and intelligence can be achieved through advice and training missions with an indigenous or a partner force. For that purpose, other time phases are usually used instead of the common modern find, fix, finish, and exploit phases. However, for SR units to access a target and collect the information and achieve *relative certainty* (actionable intelligence), valid principles are needed. The focus of the next section is foremost concerned with the principles related to SR.

C. THE PRINCIPLES EXPLAINED

SR missions are different from strike mission or force-on-force engagement. The current principles of war (battle) or principles of special operations do not sufficiently enough explain why an SR operation can succeed. Therefore, this thesis asserts that other principles need to be considered.

1. Preparation Phase

The principles of *coordination* and *review* are essential during the preparation phase, and they can also apply to the planning phase. If one has the time, the preparation phase should be used wisely. It is during this phase that the plan, the level of training, and

102 Waltz, *Information Warfare*, 110, Waltz has interpreted and modified the component from National Security Agency, *National Cryptologic Strategy for the 21st Century*, accessed March 2, 2016. https://cryptome.org/jya/nsa-ncs21.htm.

103 NSA, Goal 2, Military operations, 1997; *National Security Agency*, *National Cryptologic Strategy for the 21st Century*.

preparedness will be noted. It could well be the details that could make the difference in whether the SR mission is successful or not. Today, the level of details has changed from counting tanks and fortifications to include the details of biometrics, physical descriptions of individual persons, and computer data.

a. Coordination

The intelligence synchronization relates to the SR principle of coordination. ADRP 2-0 mentions intelligence synchronization as one of the core competencies:

> ***Intelligence synchronization*** **is the "art" of integrating information collection and intelligence analysis with operations to effectively and efficiently support decisionmaking.** [bold in original.] This core competency ensures the intelligence warfighting function supports mission command. Intelligence synchronization balances time with collection, production, required accuracy, and specificity to meet the commander's and other requirements.[104]

However, coordination means more than just the intelligence process for SR missions. Some operational and tactical examples that need confirmation or clarification include boundaries; objectives; coordinating points; medical and casualty evacuation procedures; command, control, communications procedures; and quick reaction forces' procedures. It is also necessary to know whether any friendly units operate in the area of operation. When SOF is working in a multinational environment, units must have procedures for working alongside soldiers from other countries without risking security. The use of liaison officers could be the success criteria for coordination.

The inherent mobility of SOF is unique. Therefore, SOF should coordinate with the insertion and extraction platform and other units supporting the operation. The infiltration or extraction assets should be included as much as possible in the planning process. They could have a better solution to the insertion plan or extraction plan. A necessary coordination would be with the intelligence section, intelligence officer, or analyze and research cell. Reporting procedures and the routine meeting should be

104 U.S. Department of the Army, *Intelligence*, 2–10.

clarified since this department would likely be the ones who will receive the intelligence report.

A modern solution to overcome this division and obstacle can be to set up a fusion cell or center. According to ADRP 2-0, "A fusion center is an ad hoc collaborative effort between several units, organizations, or agencies that provide resources, expertise, information, and intelligence to a center with the goal of supporting the rapid execution of operations by contributing member."[105] In addition, the publication states that "commanders at various echelons create fusion centers to manage the flow of information and intelligence, focus information collection to satisfy information requirements, and process, exploit, analyze, and disseminate the resulting collection."[106] This serves as evidence that coordination including allocation of missions, targets, resources, and collection assets are essential. Therefore, this part falls under the SOF SR coordination principle.

The highest command level and the tactical level need coordination to ensure the right conditions for success. SR missions may support or operate in an area of interest of another intelligence organization or unit. The intelligence activities should be coordinated at suitable levels to avoid obstacles and ensure the proper use of SOF. In a situation where there are recruited human sources involved, coordination and control of the sources need to ensure no circular reporting. It is a piece of information coming from the same source and observation but is reported through more than one intelligence system or channel, thus "confirming" the information. Coordination is a principle that allows the unit to synchronize and optimize as much as possible in advance. It relates to current activities both within the organization and with external friendly units that can support the collection effort.

One example of coordination, after the first British raiding and special operations in North Africa during World War II, was the creation of what became known as G(RF).

105 Ibid., 2–11.

106 Ibid.

The G stands for "Operations Staff" and RF for Raiding Force.[107] This special department of the General Headquarters was tasked to coordinate deep penetration missions. The section focused on the missions of the Long Range Desert Group (LRDG) and Special Air Service (SAS) as other commands 'raiding units at the time.[108] The units sent, on occasion, liaison officers to the headquarters even before the set-up of this special staff. However, this liaison was all done in an ad hoc, inconsistent, and compartmentalized approach. After the establishment of G(RF), raiding and for the LRDG, intelligence collection operations became more coordinated over time. The introduction of this new model also allowed for a better distribution of resources. Chiefly, the activities were nested with the overall campaign plan.[109]

Also, the coordination became more necessary when the SAS started to conduct raids against German and Italian airfields. At the same time, the LRDG focused on reconnaissance missions in support of strategic signals intelligence, through "Ultra."[110] The coordination again became necessary with the later advance of the British Army. Also, logistical and medical support needed coordination. Similarly, other growing special desert operations and collection operations needed coordination so as not to compromise operations.[111]

Another modern example of operational but also tactical coordination was completing the Tasking and Coordination Groups (TCGs) for the Northern Ireland conflict.[112] This conflict was a counterinsurgency, where various specialist units took a large part in the conduct of intelligence operations and strike operations.[113] The TCG is the forerunner of today's fusion center. The first TCG was set up in late 1970 to

107 John W. Gordon, *The Other Desert War: British Special Forces in North Africa, 1940–1943* (London: Greenwood Press, 1987), 134–35.

108 Ibid., 135.

109 Ibid., 134.

110 Ibid., 136.

111 Ibid., 144.

112 R.J. Arascain, I*ntelligence Services in Northern Ireland, 1969–80: Spies and Surveillance in the Six Counties* (San Bernardino, CA: Broxholm Books, 2014), 72.

113 Daniel Marston and Carter Malkasian, eds., *Counterinsurgency in Modern Warfare* (Oxford: Osprey Publishing, 2008).

coordinate the multi-agencies working in, first, Belfast and later, in the rest of the region. In all, the authorities established three TCGs.[114] The purpose was to coordinate and direct the multi-sourced intelligence collection including source and agent handling, covert static and mobile surveillance, and signals intelligence. All the special police, security services, local special police, and SOF units from the British Army performed the intelligence activities to some degree.[115] Thus, there was a need to coordinate. Also, the TCGs could direct and give the task to carry out raids, such as a search or arrest operation, to strike units from either the police or the army when actionable intelligence was achieved.[116] Furthermore, the TCGs had the mandate to direct conventional units to some extent.[117]

TCGs dramatically strengthen the overall effort of the multiagency approach. Mark Urban states that "the setting up of the TCG was probably the most important of all the steps taken during the late 1970s towards enhanced information-gathering."[118] According to R.J. Arascain, "TCGs allowed the exploitation of specific, actionable intelligence, from both the Army and RUC [Royal Ulster Constabulary], effectively, providing an organizational structure for bringing to bear all necessary elements of the Security Forces in pursuit of one objective."[119] Of interest, it was a Special Branch officer that was in charge of a TCG.[120] Special Branch is, according to Rob Lewis, "a specialist unit within the [civilian] police which carries out surveillance and source handling among other tasks."[121]

In sum, coordination is a combination of process, organization, certain authority, and "a special mind-set." Units and higher staff section use the principle of coordination

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114 Arascain, *Intelligence Services in Northern Ireland*, 72.

115 Ibid., 72.

116 Ibid., 72–73, 75–78.

117 Ibid., 74.

118 Mark Urban, *Big Boys' Rules: The SAS and the Secret Struggle against the IRA* (London: Faber and Faber, 1993), 94.

119 Arascain, *Intelligence Services in Northern Ireland*, 81.

120 Urban, *Big Boys' Rules: The SAS and the Secret Struggle Against the IRA*, 95.

121 Rob Lewis, *Fishers of Men* (London: Hodder and Stoughton, 2000), 246.

to create conditions for successful missions. SOF should not, without coordination, perform in the same capacity. On the tactical level, the collection element needs to coordinate with, for instance, backup or quick reaction forces, the infiltration and exfiltration platforms as with the receiving and tasking organization for the collection.

b. Review

The review principle is thought both as a practical exercise and as a combination thereof. The use of SOF, usually in low numbers, needs continuous review and consideration of emerging alternatives. During the *review*, one should take the opportunity to see whether the plan will work, for example, by war-gaming. An important detail of the review part is risk assessment and the actions to reduce the risk to the mission, risk to force, and risk to a third party, civilians, or an intelligence source. SOF is familiar with high risks, but the situation may have changed since the planning started. For instance, the starting points for the intelligence collection are subject to principle to refine the plan and confirm the initial access to the information. Equally, there is a need to review constantly the latest intelligence on the target, target set, or threat assessments. As an example, the weather and terrain, and the effects on the area or target or equipment need consideration. Another area that falls under this principle is the employment of standard operating procedures, and integrating lessons identified from prior experiences. It can be knowledge from one's own unit or another organization.

Also, contingency plans are especially important for SR units to include cover and compromise plan, no-communications plan, escape and evasion plan, and abort criteria. All these actions need review to optimize the conditions for success before carrying out the mission. As an example, the conventional army's Field Manual, *Long-Range Surveillance Unit Operations*, has one chapter devoted to evasion and recovery, as well as three appendixes to cover various contingencies.[122]

One of the advantages of the principle of review is for the planner and the collector to stop and reevaluate the mission and the approach of the collection. The

[122] U.S. Department of the Army, *Long-Range Surveillance Unit Operations.*

collection might not succeed if everything always is treated as a routine mission or if an assumption goes unchallenged. This study asserts that it is necessary to constantly reflect on the situation, the mission, the risk, and the collection approach. Critical reflection would include the probability and relevance of intelligence requirements and essential elements of information, the planned method and approach, the cover plan, and risk mitigation and contingency plans.

A specialized organization, or role, called Advanced Force Operation (AFO) used the principle of review during Operation Anaconda in Afghanistan in 2002. The AFO was an SOF organization with the mission to prepare the battlefield and collect actionable information on high-value targets and individuals.[123] AFO directly supported the conventional air assault mission of Operation Anaconda in March 2002.[124] For weeks, the AFO had collected on the situation in the target area. They got the foundation for starting points for the deep reconnaissance mission that would follow in support of the air assault.[125] Regularly, the AFO reassessed the information and intelligence requirements, the targets, courses of action, risks involved, approaches, and methods to find the best way to access the target area of interest.[126]

As an example, reconnaissance teams conducted an early reconnaissance to probe the infiltration and exfiltration routes, and to develop an understanding of the terrain and the weather. This activity aimed to decide on the final approach. AFO was, therefore, able to make a thorough assessment of the possibility and relevance to access the target areas successfully. The initial reconnaissance can be viewed as a form of rehearsal. Mainly, it was a review of the idea, collection plan, and intended collection method. It

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123 Sean Naylor, *Not a Good Day to Die: The Untold Story of Operation Anaconda* (New York: New York: Berkley Caliber Books, 2005), 34; Pete Blaber, *The Mission, the Men and Me: Lessons from a Former Delta Force Commander* (New York: Berkley Caliber Books, 2008), 203–6.

124 Naylor, *Not a Good Day to Die*, 143, 173–74, 189, 244, 261–64; Blaber, *The Mission, the Men and Me,* 248.

125 Naylor, *Not a Good Day to Die*, Chapter IPB.

126 Blaber, *The Mission, the Men and Me*, 216, 222, 227, 228, 234–41, 251; Naylor, *Not a Good Day to Die*, 95–117.

was a deliberate part of the planning and preparation for executing the coming SR operation.[127]

2. Execution Phase

The execution phase would perhaps be the phase that differs the most from McRaven's model. Speed, as in McRaven's theory, is not necessary, but time and timing are. An SOF unit could fulfill a collection mission using a static observation post for weeks. The SR principle of cover is not the same as surprise. For a successful SR mission, there is no need for surprise as described by McRaven.[128] The presence of SOF can be clandestine, discreet, or even overt. Depending on the operational environment, a collection unit may come back repeatedly to an area to collect the information. Therefore, there may be no need to push beyond the abilities or to take unnecessary risks to do the mission. However, sometimes, there is minimal time to prepare, and if a target presents itself, the unit might only have one attempt to access the information. The purpose principle is necessary but differs compared with McRaven's assertion. The purpose for an SR mission applies the intelligence requirements, end state, and the time available to carry out the mission. During this phase, the necessary principles are *cover*, *reporting*, and *exploitation*.

a. Cover

The principle of cover is the one principle, together with reporting, assessed to be fundamental for SOF. SOF applies this principle to assume the risk involved and create access to a target and collect the information. ADRP 3-05 mentions the core principles of SOF, where one principle is "discreet."[129] The SR cover principle can, therefore, apply and support the general SOF principle.

127 Naylor, *Not a Good Day to Die*, 99–101.

128 McRaven uses the Doctrine for Joint Special Operations at the time (JCS Doctrine for Joint Special Operations, E-5); "Surprise is the ability to strike [emphasis added] the enemy at a time and place, or in a manner for which he is unprepared." McRaven, *Spec Ops*, 16.

129 U.S. Department of the Army, *Special Operations*, ADRP 3–05, 1–6.

However, there are two subsets of cover including the use of terrain, weather, disguise, and camouflage. This cover can be satisfied by using tactics and procedures as material and technology or a combination thereof. In short, this resonates as a cover for action and connects in several ways to military deception.[130]

The other subset is the use of various kinds of direct or indirect support. It allows SOF to accept the risk to mission with establishing situational awareness, as well as the use of backup or quick reaction forces. A normal tactic is the use of field-mission support sites. It is a location where SR teams from an observation post can transmit their images for further processing and communications to higher headquarters.[131] Properly planned, the site can also support the forward observation posts if and when need.

Another type of cover and support were the use of unmanned ISR platforms during Operation Anaconda. ISR supported the AFO teams' initial reconnaissance and probing missions with situational awareness and direct fire support. The teams could also request fire support from fixed wing AC-130. There were also teams on standby to act as quick reactions forces and support.[132] The same kind of support was on call for the actual SR mission later.[133]

The principle of cover, similar to the AFO, was used almost 60 years earlier by a German SOF unit, collectively for all its units known as "the Brandenburgers," during World War II. The Brandenburgers undertook a long-range reconnaissance mission to confirm British forces' line of communications between West Africa and Egypt.[134] According to Franz Kurowski, the "primary objective was to halt the flow of supplies to the British army over the west-east route which began in the Gulf of Guinea in the west

130 Scott Gerwehr and Russell W. Glenn, *The Art of Darkness: Deception and Urban Operations* (Santa Monica, CA: RAND Corporation, 2000), chapter 3.

131 Couch, *Always Faithful, Always Forward*, 163.

132 Naylor, *Not a Good Day to Die*, 104.

133 Blaber, *The Mission, the Men and Me*, 263, 267–68.

134 James Lucas, *Kommando: German Special Forces of World War Two* (Edison, NJ: Castel Books, 2003), 84.

and led across Central Africa to Port Said."[135] James Lucas states that the Germans used "British uniforms and would travel in captured British Army vehicles. These would form a road convoy with all the appearance of [the British LRDG] Long Range Desert Group patrol."[136] The Germans had already the experience of using civilian clothes and the military uniforms of the armies of Low Countries and Poland. The Germans had conducted reconnaissance missions in the months and days leading up to the attack in the West in 1940.[137] French troops met one Brandenburger group along their route in Africa towards the objective, but the German group was not compromised because of the disguise.[138] Eventually, the intelligence reports from the Brandenburgers told Rommel that at least three mechanized divisions were needed to penetrate the area and disrupt the lines of communications. However, the whole campaign was abandoned, since Rommel could not spare that amount of force from the front lines in North Africa.[139]Also of interest, Lucas mentions that a captured British Spitfire would "be used to carry out long-range reconnaissance ahead of the group."[140] The Spitfire, still with British markings, was flown by a pilot from the Brandenburgers and conducted several successful reconnaissance flights in support of the Brandenburgers' mission and avenue of approach.[141]

This direct aerial support for cover and situational awareness was not available to the Norwegian agents belonging to the SOE in 1942. They acted as an advance force for the successful sabotage raid on the heavy water production plant at Vemork in Norway during World War II. The advanced party of four men, called Operation Grouse, was

135 Franz Kurowski, *The Brandenburger Commandos: Germany's Elite Warrior Spies in WWII* (Mechanicsburg, PA: Stackpole Books, 2005), 178.

136 Lucas, *Kommando*, 85.

137 Ibid., 48–49.

138 Kurowski, *The Brandenburger Commandos*, 179.

139 Ibid., 180.

140 Lucas, *Kommando*, 85.

141 Kurowski, *The Brandenburger Commandos*, 177, 179.

inserted by parachute into the harsh snowy wilderness of Hardangervidda in Norway.[142] Their first mission was to collect information about the heavy water plant with the use of reconnaissance and civilian agents inside the factory. They would also act as a guiding force to a British glider-borne commando unit.[143] However, this particular sabotage mission did not succeed, despite the efforts of the advance party. The mission was canceled when the two gliders, which carried British commandos, crashed. Several soldiers perished in the crash, and the survivors were captured and executed by the Germans.[144]

However, the Norwegian advance party continued its operation, now renamed Swallow, after the unsuccessful sabotage attempt.[145] The outnumbered advance party lacked any direct fire support. The Norwegians used the terrain and challenging weather as cover, and the German soldiers did not risk entering this "safe area."[146] Therefore, the team could stay hidden during the harsh winter months on the Hardanger plateau until the next attempt to sabotage the plant. The team used small huts, the local knowledge, and survival skills, and the soldiers' superb training made it possible to avoid a complete compromise.[147]

Also, developing what is called a "cover story" was part of the SOE agents' training.[148] Cover stories are assessed to be an important part of the first subset of the principle of cover. If an enemy or third party were to approach an SOF collector, he or

142 Thomas Gallagher, *Assault in Norway: Sabotaging the Nazi Nuclear Program* (Guilford, CT: Lyons Press, 2002), Kindle edition, 21, 28. There was another Norwegian SOE agent that had been parachuted in even before the advanced party. His job was to collect more information about the factory, since this was his ordinary job as well as being committed to other operational support. The information was subsequently reported via contact to "Grouse," who then transmitted the information and other findings back to England. Gallagher, *Assault in Norway*, 15; Mears, *Real Heroes of Telemark*, 25, 42–43, 67–68, 96–98, 160; Kurzman, *Blood and Water*, 52–58; Jens-Anton Poulsson, *Tungtvannssabotasjen* [The Heavy Water Raid]. (Oslo: Orions Forlag AS, 2007), 89

143 Gallagher, *Assault in Norway*, 125; Poulsson, *Tungtvannssabotasjen*, 65, 90.

144 Kurzman, *Blood and Water*, 68–69, 84, 92, 107, 109.

145 Gallagher, *Assault in Norway*, 63; Mears, *Real Heroes of Telemark*, 96, 151; Poulsson, *Tungtvannssabotasjen*, 90.

146 Mears, *Real Heroes of Telemark*, 138.

147 Mears, *Real Heroes of Telemark*, 28–40, 104; Gallagher, *Assault in Norway*, 21–23, 80.

148 Poulsson, *Tungtvannssabotasjen*, 58, 75.

she would have to tell a believable story to explain why the collector is at a certain location. Peter Jenkins, a modern surveillance specialist, states, "Remember, that in everything we [surveillance experts] do we must always act naturally, adopt an identity and have a reason for being there [on the property]."[149] In short, a cover story, or "cover for action," is a believable reason for a collector or a whole unit to be at a certain location. It can also be to mask certain activity without compromising the SR mission. The cover should be developed and known before the execution phase of an operation.[150]

Furthermore, the Norwegian SOE operators used civilian clothes, apart from their British military uniforms during the raid.[151] They had falsified papers and money as cover. This was used to develop their civilian contacts at the plant and collect up-to-date information about the German forces at the factory, and the status and development of the heavy water.[152] Also, the SR team used civilian contacts as surrogates and cover for collecting the information about the status *of* the factory.[153] Meanwhile, another Norwegian sabotage team of six men, called Operation Gunnerside, was getting ready to be inserted in the country with the mission to sabotage the factory.[154] Eventually, the combined raiding and advance party entered the factory using stealth and destroyed the targets based on excellent intelligence and knowledge, thus delaying the German efforts with heavy water production for months.[155] Again, cover stories were developed and used in the interaction with the resistance and civilians as German and Norwegian authorities. This cover was important for the SOE agents who continued to stay and joined the resistance or collected intelligence after the successful raid.[156]

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149 Peter Jenkins, *Surveillance Tradecraft* (Harrogate, England: Intel Publishing, 2010), 17–18.

150 Varangian Press, *The CIA Guide to Clandestine Operations*, (Denver, CO: Varangian Press, 2011), 139.

151 Gallagher, *Assault in Norway*, 25, 120; Poulsson, *Tungtvannssabotasjen*, 81, 103.

152 Gallagher, *Assault in Norway*, 63–64, 165; Mears, *Real Heroes of Telemark*, 43, 98, 100.

153 Poulsson, *Tungtvannssabotasjen*, 90; John Berg, *Soldaten som ikke ville gi seg* [The Soldier Who Never Gave Up], (Unknown: Metope, 1986), 119.

154 Gallagher, *Assault in Norway*, 51–53.

155 Gallagher, *Assault in Norway*; Poulsson, *Tungtvannssabotasjen*; Kurzman, *Blood and Water*; Mears, *Real Heroes of Telemark*.

156 Gallagher, *Assault in Norway*, 191.

The use of *cover*, both physical and for action, in an urban counterinsurgency environment, is a unique challenge.[157] Often, counterinsurgency operations take place in the urban environment since a large part of the population lives in urban areas.[158] Also, an urban environment offers the guerrillas or insurgents places to hide and operate. Scott Gerwehr and Russell W. Glenn mention two key factors that separate the urban environment with other settings: "the physical uniqueness of urban terrain and the presence of a large noncombatant population."[159]

The Northern Ireland conflict is an example of urban conflict. According to R.J. Arascain, "the loss of control and lack of intelligence … sparked the Army's desire to improve its intelligence [in 1971]."[160] The British army, as well as loyalist agencies and organization, formed special urban surveillance, reconnaissance, and human intelligence units. The purpose was to develop intelligence on mainly the Irish Republican Army's targets and individuals.[161] On an operational level, the specialized units were given different cover names. The purpose would be to obstruct the opponent from gaining knowledge and create ambiguity about the British intelligence.[162]

James Rennie, a former British surveillance operator, suggests some tactics and procedures for cover: "the surveillance team was quietly casting itself about the surrounding streets and alleyways, melting into the routine of the area."[163] Usually, Northern Ireland surveillance operators worked in different civilian clothes in a non-permissive environment and needed to blend in the surroundings.[164] The operators

157 Gerwehr and Glenn, *Art of Darkness*, 7–10.

158 David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (New York: Oxford University Press, 2013).

159 Gerwehr and Glenn, *Art of Darkness*, 8.

160 Ibid., 39.

161 Maurice Punch, *State Violence, Collusions and the Troubles: Counter Insurgency, Government Deviance and Northern Ireland,* (London: Pluto Press, 2012), 87–90. Arascain, *Intelligence Services in Northern Ireland*.

162 Arascain, *Intelligence Services in Northern Ireland*, 35, 39, 40, 44, 54; Punch, *State Violence, Collusions and the Troubles*, 87–90.

163 James Rennie (pseudonym), *The Operators: On the Streets with Britain's Most Secret Servic*e (Barnsley, England: Pen & Sword Military, 2013), 1.

164 Rennie, *The Operators*, 92, 94, 159.

worked either alone or in a pair, but had a backup or quick reaction forces on standby. Rennie describes the backup team as an "invisible web [that] was holding the targets in its center as they moved through the streets."[165] For the individual operator, Rennie mentions that "[the] easy ability to appear ordinary was our greatest strength."[166]

These specialized units also used well-camouflaged covert observation posts and close-target reconnaissance in an urban environment as methods for collection.[167] To increase the accomplishment of the close-target reconnaissance mission, there would be a support of other functions, and according to Rennie, "there would always be drop-off vehicles and an emergency back-up team."[168]

Former surveillance operator Aaron Cohen mentions that the Israelis have created several SOF units for "undercover" specialist tasks. Because of the difficulty of gaining access in an urban insurgent environment, at least two units were set up with a different focus. One unit focused on West Bank, and the other unit focused on the Gaza Strip.[169] According to Cohen, the operators were "operating undercover disguised as Palestinian men and women."[170] The reason for the undercover work and different focus was that "undercover work is as much art as it is science, and each Palestinian town, village, and region has its own distinct manner and customs with which the Special Forces operatives must be fully familiar."[171]

To summarize, cover in SR collection and SOF activities is nothing new to warfare. Cover and cover stories can and should be adopted and used at all levels of war and command. The idea of the cover has multiple layers. First, the principle of cover relates to the collection unit's true mission and whether the mission would be detected or

165 Ibid., 3, 10–11.

166 Ibid., 168.

167 Ibid., 107, 110–11.

168 Ibid., 108, 154, 177.

169 Aaron Cohen and Douglas Century, *Brotherhood of Warriors: Behind Enemy Lines with a Commando in One of the World's Most Elite Counterterrorism Units* (New York: Harper Perennial, 2009), 16, 114. The Gaza Strip unit was assimilated into other units after the Oslo peace accords in 1994 (p. 124).

170 Cohen and Century, *Brotherhood of Warriors*, 2.

171 Ibid., 16.

compromised. SR missions can be overt but with a covert intent or purpose. The cover principle applies to the right "cover," disguise or camouflage for the collecting force to avoid tactical detection and compromise. Second, the cover principle applies to support the execution *as in protection*, for the actions on target. The use of cover or back-up teams and quick reaction forces are examples of this to support the collectors to access the information and assume the risk to do so.

In short, the collectors have to *blend in* with the surroundings. How to blend in and use of cover depends on the nature of the mission, where, and when the mission is conducted. The cover could also include certain manned or unmanned and human-enabled technologies (for instance planted and remote controlled cameras), the use of surrogates and even proxies to achieve the necessary ability to see, collect, and in turn, report the findings. The use of so-called pseudo forces or operations is a tactic that resonates with this principle. According to Lawrence Cline, pseudo forces are "government forces and guerrilla defectors [who] portray themselves as insurgent units."[172] The primary use of a pseudo force has been to collect human intelligence and to access a target not normally accessible by other means.[173]

b. Reporting

After successfully accessing a target with the use of the cover principle, the next principle to apply is reporting. Reporting of the related the intelligence requirements is the core for an intelligence-collecting unit. The purpose of an SOF collecting unit is to report its observations and findings. The *U.S. Army Reconnaissance and Surveillance Handbook* frames this main principle as "tell commanders what they need to know in time for them to act."[174] The principle includes the information to the headquarters as a shared understanding within the collecting unit. In the last sense, reporting means that collectors develop a good awareness on their own situation on "the battlefield." This is particularly important with the use of cover or backup teams. Communications are to be

172 Lawrence E. Cline, *Pseudo Operations and Counterinsurgency: Lessons from Other Countries* (Carlisle Barracks, PA: Strategic Studies Institute June 2005), v, http://www.carlisle.army.mil/ssi.

173 Ibid.

174 U.S. Department of the Army, *U.S. Army Reconnaissance and Surveillance Handbook*, 2–3.

considered success criteria. Lost communications can be an "abort criterion" once the mission is underway. Therefore, useful and efficient ways of communication with or contacting, even face-to-face, the "customer" are necessary.

David Lloyd Owen, one of the founders of the British LRDG during World War II, mentions four fundamentals for small unit actions behind enemy lines: "the most careful and detailed planning, first class equipment, *a sound and simple communication system* [emphasis added] and a human element of rare quality."[175] Further, the Alamo Scouts, the U.S. 6th Army reconnaissance unit in the Pacific theater during World War II, trained every member of the patrols in radio and communications skills. Every soldier carried at least one personal small range radio, and the patrol had at least one patrol radio to communicate with the unit's headquarters and support elements.[176]

Also, during Operation Anaconda in 2002, the AFO teams had reported their findings on the Al Qaeda and Taliban fighters before the main helicopter air assault began. There was a sufficient understanding of the enemy situation. However, after the first unsuccessful air assault, the operation almost ended. The commanding general, at the headquarters at Bagram, decided not to let the other air assault waves continue due to resistance by the enemy.[177] However, because of the employed AFO teams and their reporting, the AFO commander was able to persuade the commanding general to continue the heliborne assault. The AFO teams had an entirely different understanding of the battlefield and therefore contributed to a change of decision that eventually led to a successful operation.[178] The AFO commander at the time, Pete Blaber, explains his guiding principle and philosophy: "a unit should communicate with one central philosophy: boundarylessness. Boundaryless means no borders, and in all directions. Openness [within the same organization] is good; compartmentalization and secrecy are

175 David Lloyd Owen, *The Long Range Desert Group 1940–1945: Providence Their Guide* (Barnsley, England: Pen & Sword Military, 2001), 5.

176 Alexander, *Shadows in the Jungle: The Alamo Scouts behind Japanese Lines in World War II*, 60–61, 80–82.

177 Blaber, *The Mission, the Men and Me*, 265.

178 Ibid., 268–271.

not."[179] Further, he mentions that "it is not a reality unless it is *shared*," and "sharing information is how we [the AFO] create an accurate portrayal of reality."[180]

Another example of the importance of reporting is the LRDG effort known as the "Road Watch." Alastair Timpson, a former LRDG member, recalls that "the most valuable intelligence function of the LRDG was known as the "Road Watch."[181] He describes the missions as "counting and describing every vehicle of the enemy on the main coastal road, … and reporting every night the result by W/T [wireless transmission] (in code of course) to LRDG HQ, … for immediate transmission to Army HQ."[182] The surveillance operation, apart from a few occasions, was continuously carried out deep behind the German lines, from March 1942 to December 1942.[183] The road watch patrols collected intelligence on the Germans including actual strength and logistics. The reports contributed to the plan, preparations and the aftermath of Montgomery's successful offensive at El Alamein in October–November 1942.[184] Before the undertaking, a few days of trial period and initial reconnaissance took place in the early spring of 1942, thus supporting the already mentioned the principle of review.[185]

In sum, the intelligence report is the *effec*t provided by an SR unit. All forms of communication to the receiving department are necessary. Reporting the findings and observation in a detailed, timely, reliable, and accurate manner is essential. Otherwise, the SR mission will most likely be unsuccessful since the whole purpose is to collect and report intelligence. If the reporting in time is not possible, then the intelligence collected can serve a different purpose in confirmation to other sources, to introduce starting points for other collection efforts or further exploitation, the last principle of SR.

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179 Ibid., 296.

180 Ibid., 295–96.

181 Alastair Timpson and Andrew Gibson-Watt, *In Rommel's Backyard: A Memoir of the Long Range Desert Group* (Barnsley, England: Pen & Sword Military, 2010), 7.

182 Ibid.

183 Ibid.

184 Gordon, *The Other Desert War*, 139–41.

185 Gordon, *The Other Desert War*, 140; Timpson and Gibson-Watt, *In Rommel's Backyard*, 7.

c. Exploitation

Intelligence operations are almost always planned activities. Regularly, there is a need for intelligence, and it can be important to create *new* access to information, or to exploit the situation. The rapid and fluid situations in today and tomorrow's conflicts will call for forces and commands' ability to switch focus. It can be to take offensive action or support a finishing force, whenever a target is fixed to exploit a situation fully. Also, exploitation is necessary when organizations prepare for the next collection effort. The principle of exploitation supports the next step of planning and managing efforts and collection assets.

In present-day conflicts, site exploitation after or during raids is part of this principle, and the importance of this collection method has increased. In short, an organization gathers as much information as possible whenever this opportunity presents itself. This approach includes collection through tactical questioning and interrogation, documents and multimedia devices, forensics, and biometrics.[186] The overall purpose is to gain detailed knowledge, thus increasing the certainty on the target or the general situation. Often, this type of exploitation can serve as the starting point for other collection methods.[187]

The principle of exploitation played an important part on a strategic level, again in the Desert War of World War II. The LRDG road watches provided not only the headquarters with a detailed intelligence on the Germans but also confirmed the signal intelligence collected under the cover name of "Ultra."[188] At the time, the LRDG did not know the British had broken the German code machines. However, the LRDG played an essential role. According to Gordon, the road watch patrols assisted "[the General Headquarters-Middle East's] intelligence staff in the verification and assessment of Ultra by supplying empirical data gained from actual observation in the field."[189] The timing of

186 U.S. Department of the Army, *Site Exploitation*, ATP 3–90.15 (Washington, DC: Headquarters, Department of the Army, July 2015).

187 Flynn, Juergens, and Cantrell, "Employing ISR."

188 Gordon, *The Other Desert War*, 136.

189 Ibid., 141.

the British offensive depended on, among other things, the knowledge of the actual situation of German supply and logistics. However, Rommel had unknowingly, through his requests and reports to the German higher command, reduced his capacities and abilities. Simply, Rommel wanted more resources. If the Allies read only Ultra signals intelligence, this would give a wrong interpretation of the German plans and capabilities. The Allies had a trump card in the signal intelligence, and without Ultra, it would have been difficult to defeat Rommel. Eventually, the road watch patrols complemented the signals intelligence and together the two intelligence disciplines became a powerful combination and provided a more accurate intelligence on the situation.[190] Ultimately, the Battle of El Alamein became a turning point in World War II.

Another part of the exploitation principle is to make direct use of the observations and intelligence provided. This can be an implied task for SOF. Occasionally, SR units are the only available units with access to the target area. For instance, the AFO teams in 2002 steadily directed air strikes on targets they saw from their observation posts to support the conventional helicopter assault. Blaber mentions that "all AFO members were engaged in a continuous cycle of locating, marking, and destroying enemy targets inside the valley, while maintaining a hyperalert security status for enemy fighters to do the same to them.[191]

A further example of exploitation is the use of SR units in successful deception operations. Alexander describes that a patrol from the Alamo Scouts, prior to an amphibious assault, planted an aviator's notebook for the Japanese to find. "The notebook contained false information on American invasion plans, confirming Japanese suspicions [on the intently false landing beach]."[192] In another task, local guerrillas supported the Alamo Scouts, where the assignment was not only to collect intelligence on a Japanese prison camp but also to act as a guiding force for a larger Ranger rescue force. The intelligence gathered helped the rescue force complete the plan, and the Scouts

190 Gordon, *The Other Desert War*, 131–54; John Sadler, *Ghost Patrol: A History of the Long Range Desert Group, 1940–1945* (Oxford: Casemate, 2015), 273–76.

191 Blaber, *The Mission, the Men and Me*, 264.

192 Alexander, *Shadows in the Jungle*, 97.

guided the rescue force to the camp. Also, they guided the force and the rescued prisoners to American lines.[193]

In sum, to increase certainty and confirm intelligence with follow-up activity the principle of exploitation is needed. It also serves to create a starting point for other collection methods. These are logical steps to ensure success and set conditions for follow-on missions. Further, this principle nests with the SOF characteristics of "creating access." If SOF have infiltrated and started to report on the target, it would be prudent to take advantage of the opportunity.

D. APPROACH

The approach selected for this thesis is a comparative case analysis of qualitative content and text analysis to confirm or deny the hypothesis, in other words, to test the theory with a use of a model with the suggested principles considered for this research.

1. Introduction

The cases and events are assessed to be relevant to answer the research question for this thesis. In addition, this thesis has a heuristic approach.[194] This relates mainly to the theory, but also, some of the SR principles are new since they have not been observed before. Also, the thesis has grouped different theories and principles on special operations into two categories. There is a distinction between theories that support special operations in achieving its aim and theories explaining what special operations are. For example, William H. McRaven's theory and principles are a theory *for* special operations (in particular direct-action missions). Robert G. Spulak, Harry S. Yeager, or Colin S. Gray's theories and descriptions *of* special operations are theories *of* special operations.[195] Furthermore, the SR theory and principles with some initial findings were presented at a panel discussion. Panel participation was part of the heuristic approach and generated

193 Alexander, *Shadows in the Jungle*, 233–56.

194 One definition of *heuristic* is "using experience to learn and improve." *Merriam-Webster*, s.v. "heuristic," accessed January 10, 2016, http://www.merriam-webster.com/dictionary/heuristic.

195 McRaven, *Spec Ops*; Yarger, *21st Century SOF*; Spulak, *A Theory of Special Operations*; Gray, *Explorations in Strategy*; Gray, "Handfuls of Heroes on Desperate Ventures."

early feedback to support this research. The purpose was to review and discuss the findings during an annual symposium arranged by the Special Operations Research Association in December 2015.[196] Furthermore, the choice of a qualitative approach, rather than a quantitative approach or a combination thereof, reflects the cases found in available public sources.

a. Case Selection

The chosen approach and selection of cases contribute to transparency and allow for duplication of the study. The study consists of several historical cases, and the purpose is to discover the uniqueness on SR, and confirm or deny suggested principles from a model developed for this thesis and develop new relevant principles with the findings from the cases under study. Mainly, cases of SOF or specially selected intelligence gathering units performing some form of intelligence collection have been used.

This study recognizes that not all material and information are available for use in a thesis like this. The research aims to be as comprehensive as possible. For example, it examines cases or events that include a variety of representative methods of SR including static surveillance, mobile surveillance, long-range reconnaissance, close-target reconnaissance, and the use of guerrilla force, as well as agent handling or some other form of contact handling. In addition, since SOF are expected to operate across the scale of conflict, there are cases that can demonstrate important parts of the spectrum of conflict from counterinsurgency to limited wars and major wars.

Purposely and to compare cases, the study mainly examines SR operations in the South Atlantic War of 1982 and the Korean War and the Inchon landing in 1950. The reasons and the support for this choice of representative cases is that SOF, or the SOF equivalent, played a significant part in the operations selected for study. The intelligence collection in the cases directly supported decisions made by the operational or strategic level of war. Furthermore, the selection of the cases for the case studies reflect the public

[196] Special Operations Journal, SORA-Special Operations Research Association, SORA 2015 Annual Symposium, accessed January 02, 2016, http://www.specopsjournal.org/conference.html.

availability and level of details needed for a study like this. Moreover, the authors either have participated in the operation or have access to secondary sources through first hand interviews or documents. Also, the study has explored some part of counterinsurgency conflicts: Northern Ireland, the West Bank, and the War in Afghanistan in 2002. Further, the study has examined some of the SOF-related material on a major war like World War II. This selection reflects yet, the public available material linked to SR. Furthermore, the research studied parts of the conflict spectrum from peace operations to include major war, where it is assessed SOF played an essential role. Final reasons include the typical SR missions, tasks, and the methods that are to be expected of SOF to use, with or with our technological support, on the battlefield and elsewhere in the future.

b. Data Sources and Procedures

The approach used is a comparative case analysis with known principles and a foundation from the findings from earlier research.[197] An earlier hypothesis suggested that coordination, stealth or cover, reviewable assessments, and sharing or dissemination of information are essential for SR missions.[198] These findings are used as a starting point for the intervening variables and development of a model. This model or lens is used to analyze the variables, which are the suggested and adjusted principles of SR. The generation of the model with the variables is operationalized from earlier findings, William McRaven's principles of direct action, suggested principles from current doctrine, and other special operations principles. The model consists of a set of variables used and is referenced to the comparative analysis.[199]

2. Model

The model used in this research focuses mainly on the preparation and the execution phase of a mission, although other principles and phases are discussed in the

197 Westberg, "Special Reconnaissance and Surveillance: Emerging Theory and Principles for Accomplishing Successful Missions."

198 Ibid., 33.

199 Appendix A shows the compilation of the principles used. McRaven, *Spec Ops*; Hall and Citrenbaum, *Intelligence Collection*; U.S Department of the Army, *Special Operations*, ADRP 3–05; U.S. Department of Defense, *Joint Intelligence*; U.S. Department of Defense, *Joint Operations*; Yarger, *21st Century SOF*.

respective case analysis paragraphs. This thesis uses five suggested principles directly related to SR missions. This set principles is different from those developed by McRaven and other scholars. They are the principles of *coordination*, *review*, *cover*, *reporting*, and *exploitation*, principle renamed from proactive and agility (see Table 1).

Table 1. Model and Principles as Controllables and Intervening Variables

Phase/Principle	SR principle	Comment
Preparation phase	Coordination Review	The principles can be used in the planning phase as well as in the execution phase.
Execution phase	Cover Reporting Exploitation	

a. Analyzing and Comparing of Principles

As noted, SR falls between the areas of special operations and intelligence. Appendix A of this thesis presents a table of the principles used to build this thesis' model. Some conclusions can be drawn when one orders and codifies the principles and compares the principles with the phases used in operations. There are some similarities at a first glance between direct action versus SR-related principles. There are also differences. The main differences are visible in the execution phase. The understanding of the purpose is similar, but reporting, stealth and cover, proactive and agility, and massing and maneuver are new (see Table 2).

Moreover, ADRP 3-05 states three core principles for special operations, and the publication also acknowledges the JP 3-0 (Joint Operations) describing 12 principles for joint (combat) operations and three additional principles for stability operations.[200] It

200 A compilation of principles can be found in Appendix A, including U.S. Department of the Army, *Special Operations*, ADRP 3–05, 1–6; U.S. Department of Defense, *Joint Operations*, I-2; Yarger, *21st Century SOF*, 62; McRaven's *Spec Ops* principles.

should, however, be noted that the principles relate to more direct combat–related operations.

With the use of the table in Appendix A, several military thinkers recognize the planning phase's simplicity recognized as doctrine, and the principle is therefore irrelevant for this study's model, since this is consistent across all operations. Furthermore, the preparation phase recognizes repetition and security and operations security (OPSEC) since they are similar to the idea of SR principles. However, the principles of *coordination* and *review* are new controllables and worthy of deeper study and analysis.

Table 2. The Initial Comparison of Variables and Principles[201]

	McRaven	Earlier Research
Planning Phase	Simplicity	Simplicity
Preparation phase	Security Repetition	Security/Opsec Coordination Repetition/Rehearsal Review
Execution phase	Purpose Speed Surprise	Purpose Stealth/Cover Reporting Proactive/Agility Massing and Maneuver

The respective principles should be used to plan, prepare, and execute the SOF core activity in question. However, adding more principles to an existing set of suggestions can be problematic. One can lose the overall visibility and understanding.

[201] Adapted from McRaven, *Spec Ops*, 11–21; earlier research, Westberg, "Special Reconnaissance and Surveillance," 33.

One way to overcome this is to deduce, refine, and adjust the principles to the general principles suggested.

b. Comparing Intelligence Principles

Hall and Citrenbaum's principles of agility, collection synergy, and collection condition settings relates to this study's principles of *coordination*, *review*, *reporting*, and *exploitation*. Massing and maneuver have been suggested by Hall as Flynn to be a foundation for success.[202] However, that principle relates mostly to remote-controlled assets and suggests that one's own forces can operate in a semi-permissive or a permissive environment, as there are enough forces or means to employ. The question remains this: how can SOF be used in a hostile or non-permissive environment or a battlefield without air superiority? Also, massing or the use of mass is contradictory to SOF and is not a principle for SOF to use. This is one of McRaven's assertions: SOF performs in small forces against a larger enemy formation.[203] Therefore, the mass and maneuver principle will not be further used in this thesis' model.

The 12 Principles of Joint Operations in JP 3-0 are assessed not to be relevant since they directly relate to kinetic war fighting. JP 2-0 offers several principles that can be linked to the model of this thesis. The principles of synchronization and collaboration as well as fusion, can be corresponded to *coordination.* Also, fusion and agility correspond to the principle of proactive or agility, renamed *exploitation* in this study. On the JP 2-0 intelligence principles, the SR principles can be deduced to fall under some of the intelligence principles. However, JP 2-0 is more analyst- and process-centric. Besides, it focuses on the intelligence process and architecture as a whole and not collection as such. The more important intelligence principles related to the SR principles considered for this study are synchronization, the unity of effort, prioritization, excellence, agility, and fusion.[204]

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202 Flynn, Juergens, and Cantrell, "Employing ISR."

203 McRaven, *Spec Ops*, 4.

204 U.S. Department of Defense, *Joint Intelligence*, II-1. Also see the compilation in Appendix A for this thesis.

The synchronization principles of JP 2-0 connect with the SR principle of *coordination*. JP 2-0 states, "Intelligence should be synchronized with operations and plans in order to provide answers to intelligence requirements in time to influence decisions they are intended to support."[205] The doctrine continues, "Effective synchronization results in the maximum use of every intelligence asset where and when it will make the greatest contribution to success."[206]

The JP 2-0 unity of effort and prioritization associate to the *coordination* principle of SR. "Unity of effort requires intelligence operations [including reconnaissance and surveillance], functions, and systems that are coordinated, synchronized, integrated, and interoperable."[207] Both coordination and review apply to the JP 2-0 principle of prioritization. "Prioritization offers a mechanism for addressing requirements and effectively managing risk by identifying the most important tasks and applying available resources to those tasks."[208] Also, the principle of *agility* is close to the SR review. JP 2-0 explains, "Agility is the ability to quickly shift focus and bring to bear the skill sets necessary to address the new problem at hand while simultaneously continuing critical preexisting work."[209] Furthermore, this JP 2-0 principle is associated with the *exploitation* principle of SR. In turn, exploitation applies to the fusion principle of JP 2-0. "Fusion is a deliberate and consistent process of collecting and examining information from all available sources and intelligence disciplines to derive as complete an assessment as possible of detected activity."[210] However, of note, the focus is on intelligence assessment and not reporting or collection.

The SR *reporting* principle corresponds to the excellence principle of JP 2-0. However, SR and special operations are considered to be of certain "elite" characteristics. This characterization is close to JP 2-0 description: "producers of intelligence should

205 Ibid., II-2.

206 Ibid., II-2.

207 Ibid., II-5.

208 Ibid., II-6.

209 Ibid., II-10.

210 Ibid., II-12.

constantly strive to achieve the highest possible level of excellence in their products."[211] For a product such as an intelligence estimate or report to be excellent, it would be characterized as timely, accurate, usable, complete, and available.[212] These qualities and the overall principle of excellence describe the SR principle of reporting. However, the SR *cover* principle is the only principle, which cannot be directly translated from joint doctrine. Therefore, this study suggests that cover is even more unique to SOF than to conventional principles. Figure 2 depicts the direct correlation between the SR principles and the JP 2-0 principles. It also shows the SR principles as the bridge or conduit between the JP doctrine and Yarger's principle of special operations (see Figure 2).

c. Comparing Special Operations Principles

ADRP 3-05 doctrine offers two interesting principles related to the model, the principle of discreet, which corresponds with the principle of *cover*. The precise principle can refer to the *reporting* principle of SR. (See Appendix A).

If one sets aside that Yarger's assertion was an *American* theory, his suggested special operations principles can be used as a departure point. Yarger's principles of special operations are assessed to aim for an overarching theory *for* special operations. For example, one of his principles is the principle of direct action.[213] Although his definition of direct action is broadly defined, one could argue that his suggested theory contributes to the current direct action paradigm. Yarger mentions that "special operations appear to succeed through adherence to a general set of principles particular applicable to special operations."[214]

Yarger's principles that pertain to this research are: *relative superiority*, *understanding*, *initiative*, *security*, *risk management*, *integrated operations*, and *asymmetric operations*. Yarger expands McRaven's relative superiority to include "a decisive advantage over other circumstances at the pivotal moment of interaction,

211 Ibid., II-6.

212 Ibid., II-7.

213 Yarger, *21st Century SOF*, 64.

214 Ibid., 62; Also see Appendix A.

engagement, and decision."[215] If *relative certainty* were a principle in itself, it could be placed here. The principle revolves around a certain threshold and decision, which could be the "pivotal moment." The SR principle of *reporting* could contribute to Yarger's understanding principle. Yarger asserts that "understanding is the ability to integrate mission and strategic, operational, and tactical intelligence with the individual and collective knowledge and experience of SOF personnel to advise, plan, prepare, and act." The SR principle also supports the principle of asymmetric operations as defined by Yarger since "it implies a thorough understanding and consideration of an adversary's or other actor's capabilities, intent, and expectations of action and devising an operation that counters or exploits them to advantage."[216] Part of the SR principle of *exploitation* also supports the Yarger assertion.

The *exploitation* principle is also closely related to Yarger's initiative principle. "Initiative is the ability to act under any circumstance in a manner to exert more positive control over the tactical, operational, or strategic environment."[217]

Also, the SR *cover* principle can be a part of Yarger's security principle. "It [security] involves protecting secrets, managing cover and deception, and physical security."[218] The SR principles of *review* and *coordination* would be part of Yarger's risk management and integrated operations respectively. Yarger mentions that "SOF attributes, particularly adaptability and flexibility, extend the boundaries of acceptable friendly risk."[219] In an SR operation, the *review* principle contributes to the adaptability and flexibility. Furthermore, the SR principle of coordination supports Yarger's "integrated operations." Integrated operations, according to Yarger, "includes the development and execution of operations with other military forces and nonmilitary agencies, or SOF-unique operations in a shared environment."[220] Finally, he continues,

215 Ibid., 64.

216 Yarger, *21st Century SOF*, 67.

217 Ibid., 64.

218 Ibid., 65.

219 Ibid., 66.

220 Ibid., 66.

"Integrated operations imply understanding and consideration of other actors, objectives, practices, and cultures and the national, local, and organizational perspectives."[221]

d. Integrating the Principles

The direct correlation between the principles outlined by JP 2-0, this suggested SR theory, and Yarger's special operations theory is depicted in Figure 2.

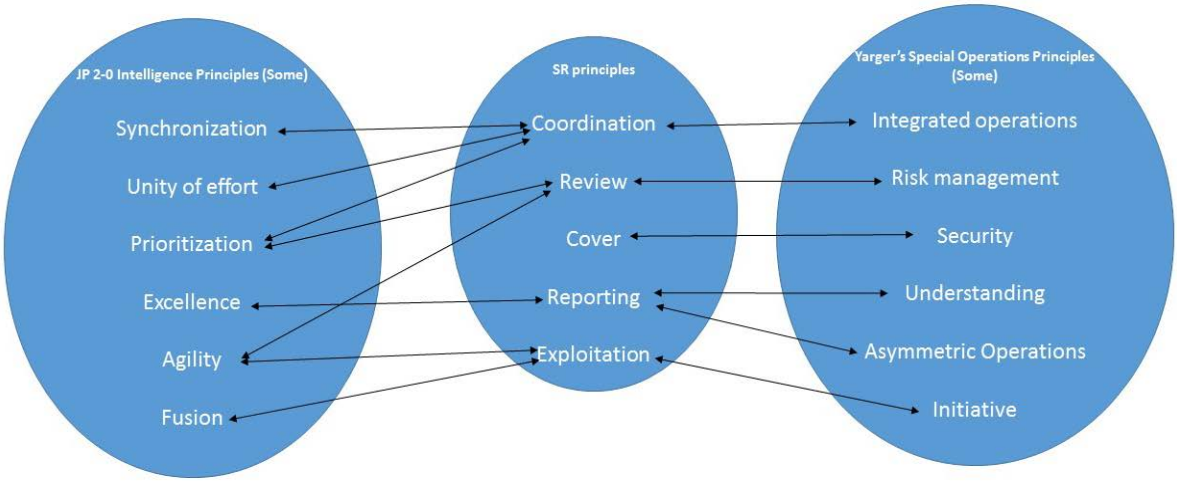

Figure 2. The Relationship between Intelligence, SR and Suggested Special Operations Principles.[222]

In sum, several military thinkers have suggested that special operations and SOF need separate principles and theories from the principles used and recognized in *conventional* doctrines. Mainly, there are five principles that are assessed to apply to SR operations, which make it interesting for further study. The model with the principles *coordination*, *review*, *cover*, *reporting*, and *exploitation* are depicted in Table 1.

221 Ibid., 66.

222 Suggested special operations principles adapted from Yarger, *21st Century SOF*, 66 anf the Intelligence principles from Join Publication 2-0, *Joint Intelligence*, II-1. The SR principles are the model and developed for this thesis.

3. Further Analysis of the Chosen Approach

As a basis for his theory, McRaven used only what can be assessed to be rewarding cases of direct action missions. In the cases selected for this study, there are examples of operations and missions that are successful as well as unsuccessful, even within the same campaign, for example, the first case study of this thesis, the Falklands War of 1982. This gives an opportunity to further analyze what variables where used or not, and find the reasons for this in the respective cases. The study of unsuccessful SR operations is effective and useful. The study of unsuccessful SR operations is effective and is supported by Karl Popper's assertion of falsification of a theory.[223] Therefore, this thesis's internal validity is found in the variables and the use of both successful and unsuccessful cases.

However, a large number of current principles relate to direct combat or kinetic operations. Therefore, the search pattern and selection of principles to be examined and used in the model for this thesis are mainly non-kinetic to distinguish them from other principles that are more commonly agreed upon. In this way, the intended effect is that several variables or principles may be analyzed, compared, and distinguished. In addition, with this approach, it is reasonable to highlight the different causes that apply and can be developed into new criteria or principles for SR.

Also, the approach presents a comprehensive possibility rather than looking at just a single variable. The idea of a comparative design is to gain performance differences between the variables, and discuss and analyze these with the selected theory and model for the thesis.

However, this study expects to find variables or imperatives that do not directly apply to the model. These findings are important and are analyzed with each selected case and addressed in the conclusions. Also, with the support of the model for this thesis,

223 The Austrian scientist Karl Popper asserts that a scientist cannot confirm the thesis and be sure if a proposition is true or accurate. In other words, only lack of success to actually falsify a theory can be accepted for a convincing theory. According to Popper, the purpose with science is to find ways to disprove theories. A theory can for the moment be accepted, when these research fall short. *Stanford Encyclopedia of Philosophy*, s.v. "Karl Popper," accessed January 5, 2015, http://plato.stanford.edu/entries/popper/.

the events, factors, and variables extracted from the cases are sorted, evaluated, and analyzed both deductively and inductively.

a. Advantages and Disadvantages

One advantage of a comparative analysis of several cases is that it is well suited from the perspective of social science and military research. The research underlines something that exists or has occurred and will remain so after the research.[224] Additionally, a comparative study is suitable since the goal is to compare existing principles and theories and at the same time possibly identify and explore uncovered factors or variables.[225] In short, this is, as Robert Stake mentions, of "value in refining theory."[226]

As a disadvantage, research like this may be criticized for its validity against the proposed observations and conclusions. In other terms, the research represents *the case* and not the "world." Thus, the findings cannot be generalized. Also, a research like this could lack quantitative data (enough samples), and therefore there is a possibility of doubtful validity and soundness of the results.

Moreover, some documents may still be classified or protected, and therefore unattainable. The source material may not be accurate. Therefore, the condition and events can be wrongfully portrayed.[227] To overcome this, the thesis aims to be as representative as possible. For instance, this study considers several SOF units with various collection methods. And the mission profiles SOF is expected to perform. These reasons will serve the purpose of the research's external validity. This study acknowledges that further broader research is needed. The thesis serves as a departure point for further research, as discussed in the last chapter.

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224 John W. Creswell, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 3rd ed. (Thousand Oaks, CA: Sage Publications, 2009), 180.

225 Creswell, *Research Design*, 55–57.

226 Robert E. Stake, "Qualitative Case Studies," in *Strategies of Qualitative Inquiry*, eds. Norman K Dezin and Yvonna S. Lincoln (Thousand Oaks, CA: Sage Publications, 2008), 141.

227 Creswell, *Research Design*, 180.

b. Variables and Definitions

The independent variable for this study is *the mission and task with the (priority) intelligence requirements* that apply to the specific SR mission. The dependent variable is the outcome, a decision, from the SR mission. The research uses the definition of SR given in ADRP 3-05. However, the definitions of core activities versus core operations are inconsistent across JP 3-05 and ADRP 3-05.[228] Notwithstanding, SR is termed as a core activity (formerly, core mission) in both documents, and the current definition suits the research. The differences between reconnaissance and surveillance in this research are as follows. Reconnaissance generally aims to seek out, verify, and obtain, and when a unit performs surveillance, it has *continuous* contact with the target. The contact can be through optics, "eyes-on," or by technical means. The core activity includes surveillance in the definition.

c. Independent Variables

Examples of independent variables are to find, confirm, or deny the presence of a certain system, equipment, or organization and terrain. It can be the outline of a target or target set. It can also be an identification of a high value individual at a certain location. Further examples could be determining the intents of a specific threat organization or confirming that the enemy uses a certain avenue of approach.

d. Dependent Variables

The dependent variable for this study is that enough intelligence was collected so that the decision makers made a *decision to continue with the planned follow-on-actions.* Even if actionable intelligence was not presented, the decision maker made an informed decision to act or not to act. Also, the organization has collected intelligence and improved overall knowledge.

228 See U.S. Department of Defense, *Special Operations*, II-3; U.S. Department of the Army, *Special Operations*, ADRP 3–05, 2–1,

e. Intervening variables

The intervening variables are the SR principles *coordination*, *review*, *cover*, *reporting*, and *exploitation* used in the model for this thesis.

f. Definitions

Principle: "general or basic truths on which other truths or theories can be based"[229]

Theory: "the analysis of a set of facts in their relation to one another"[230]

SR; Special reconnaissance [and Surveillance]:

> is defined as reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces (JP 3-05). These actions provide an additive capability for commanders and supplement other conventional reconnaissance and surveillance actions. SR may include information on activities of an actual or potential enemy or secure data on the meteorological, hydrographic, or geographic characteristics of a particular area. SR may also include assessment of chemical, biological, residual nuclear, or environmental hazards in a denied area. SR includes target acquisition, area assessment, and poststrike reconnaissance.[231]

E. CONCLUSIONS

In general, for SR missions, the planning, and the preparation phases are more iterative than linear. The principles of *coordination* and *review* are more inward and internal for the collection unit to consider. The principles of *cover* and *reporting* are more outward focused. They revolve around either direct or indirect contact with a target or an enemy. The *exploitation* principle is both of internal and external nature. More internally, the exploitation can support the collection approach to developing new starting points and other initiatives, such as a change of collection method or confirming other sources,

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229 *Merriam Webster*, s.v. "principle," accessed November 20, 2015, http://www.merriam-webster.com/thesaurus/principles.

230 *Merriam Webster*, s.v. "theory," accessed November 20, 2015, http://www.merriam-webster.com/dictionary/theory.

231 U.S. Department of the Army, *Special Operations*, ADRP 3–05, 2–6.

therefore reducing uncertainty. Also, it concerns follow-on actions such as targeting, for example, control of air strikes. Further, an SR unit can act as a guiding or pathfinder force for a follow-on force, as a subsidiary task. Also, part of the execution and the intelligence product is the intelligence debrief, which starts when the SR team returns to a safe and secure area. The timely collection, analysis, and dissemination of information recovered from a debriefing or after action review can provide answers necessary for follow-on missions or exploitation. The intelligence debrief is a necessary part in the intelligence collection effort. In particular, the headquarters needs clarify facts of information received with reporting in a *face-to-face environment*. A debrief can reveal unreported details and change the picture of the adversary or the target situation.

Also, an understanding of the purpose, end state, intelligence requirement(s), and the time available are as important during the planning and preparation as during the execution phase. However, security may not allow the SOF collector to know the final result of the mission. Normally, this is understood from the collector's point of view. However, it is important to receive some evaluation. This feedback is useful to strengthen trust and cooperation within the command and to improve tactics and procedures. This feedback applies to the review principle.

Most important is to report the findings. If the information and intelligence are not reported in a detailed, timely, and accurate manner, the mission may most likely be unsuccessful. The need to share information should guide SR missions. It is essential that everyone involved in the mission has the same understanding of the situation and target.

To summarize this chapter, there are other principles to consider for SR missions compared with the principles and theories set forth by McRaven and others. These considerations are needed for SOF to assume the risks; successfully access, collect, and answer intelligence requirements; and eventually achieve *relative certainty*. Finally, with this explanation of the chosen approach and theory, the thesis now turns to the examination of the suggested SR theory and principles in more depth with the use of historical intelligence collection cases from 1982 and 1950. The case study will start with SR missions in the South Atlantic War in 1982 for the reason it compares and contrasts one successful mission and one unsuccessful mission performed by one unit within the

same campaign. Also, the methods used by the collectors, long range and close-target reconnaissance with a combination of observation posts are considered by this study to be the fundamentals of SR. The second case study, builds on the first study, is the Inchon landing of 1950. The methods, used during the collection effort are even more advanced with the use of interrogation, source operations and an indigenous guerrilla force to gather the much need intelligence.

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IV. CASE STUDY: SR MISSIONS DURING THE SOUTH ATLANTIC WAR IN 1982

A. INTRODUCTION

The Falklands War or the South Atlantic War in 1982 is generally well documented. Of interest, several elite and special forces on both sides performed in this war, but until a few years ago, there were only rumors about what took place on a few secretive special missions. However, due to some recent declassification, details of the special operations have emerged, especially about the British operation (Operation Plum Duff) on the Argentinian mainland that was outside the declared war zone.

This chapter begins with a brief introduction and describes the choice of the cases, and then the overall context of the war. The cases of Operation Plum Duff and Operation Prelim respectively follow. Each case consists a description of the context, the origin of the operation, the mission and the planning, the execution, general analysis, and analysis of the use the SR principles with a graph of the SR theory. The chapter closes with some final observations, and an analysis and comparison of both SR operations.

1. The Cases

British SOF has been recognized as having played a significant part in the war.[232] This admittance is the main reason and validation for the choice of the cases. However, several interesting causes and observations make the employment of UK SOF intriguing to study. The research consists of one unsuccessful SR mission, Operation Plum Duff on the Argentinian mainland, and one successful SR mission, Operation Prelim on Pebble Island airfield. Furthermore, the missions were both high-risk operations and took place in the same war and time frame. The collection method used is static observation posts with a combination of close-target reconnaissance. These SR methods are the foundation of an SOF unit's SR skill and ability.[233]

232Alastair Finlan, "British Special Forces and the Falklands Conflict: Twenty Years On," *Defense & Security Analysis* 18, no. 4, (2002):319–32.

233 See, for instance, Couch, *Always Faithful, Always Forward*, 161–62.

Furthermore, the units performing the missions were UK SOF, mainly from the same unit, 22 SAS. This observation suggests the general employment and idea of SOF was the same.[234] The soldiers involved had been through the same selection and basic and advanced training. Also, the overall purpose was to combine SOF's SR capabilities with a follow-on raid, which makes the cases interesting to analyze. Further, the intended effect of the collected information served decision makers on both the strategic level and the operational level (see Table 3).

Normally, there are limited sources on the subject of SR for the reasons mentioned earlier on classification and the current paradigm, although personal experiences as secondary sources from the war are the foundation of the selected cases in this chapter. However, one main source has secondary sources and tertiary sources, but the authors have visited the battlefield.

The main difference between the missions was the use of a combined reconnaissance *and fighting* patrol in Operation Plum Duff. This approach was a precaution, if the raiding party for Operation Mikado (the actual raid) did not get approval. However, the priority list for the SR patrol and the target itself (Rio Grande) were detailed. Also, it would have most likely taken a great amount of time to collect the information to act since there was almost no information for a starting point. The independent variables for Operation Prelim, the mission, and the intelligence requirement are deduced from the primary source (see Table 3).[235] For Operation Plum Duff, the primary source gave the variables.[236] In the case of Operation Prelim, the SR patrol developed sufficient intelligence to make a decision for a follow-on raid. The intelligence collected contributed even more to the success with the use of close-target reconnaissance, since launching a raid on partially fixed targets could have resulted in a

234 One could argue that same doctrine was used. However, it is unclear to the author when UKSOF developed and documented a special operations doctrine.

235 Francis Mackay and Jon Cooksey, *Pebble Island: Falklands War 1982* (Barnsley, England: Pen & Sword Books Limited, 2007).

236 Ewen Southby-Tailyour, *Exocet Falklands: The Untold Story of Special Forces Operations* (Croydon, England: Pen & Sword Military, CPI Group, 2014).

risk to the mission, risk to force and an unwanted risk-gain analysis, and dilemma, especially when there was still time for collection and no abort criteria were present.

Table 3. Comparison of the Variables for the South Atlantic War Case Study[237]

Operation Variables	Op Prelim	Op Plum Duff	Comments
Independent	- To conduct reconnaissance and surveillance of the air field at Pebble Island to set condition for a follow on raid and sabotage mission. - The priority intelligence requirements; to confirm or deny the air field at Pebble Island and the location, type and number of aircrafts.	- "To identify the location of the enemy aircraft and, if possible, *destroy* them" [at Rio Grande Airfield] (Southby-Tailyour, *Exocet Falklands*, 131-132) - The priority intelligence requirements to determine the location of the aircraft at Rio Grande ("Priority" [intelligence requirements] for the Raid force was: - Pilots - Aircraft - Missiles - (Maintenace Crew)	Op Plum Duff Reconnaissance/*Fighting* Patrol The mission and the intelligence requirements for Op Plum Duff was inconsistent and unclear. Op Prelim Reconnaissance Patrol
Dependent	- Partially satisfied and sufficient actionable intelligence to make decision achieved already from the initial over-watch position. All information after that (static surveillance and target reconnaissance) enhanced the certainty.	- No actionable intelligence. At one time a Op Plum Duff II was considered or the Raid would go in "blind"	Planning was conducted to use SBS and a submarine. Unconfirmed reports regarding indications and warning (air activity) by submarines and or other UKSOF units. (Alastair Finlan, "British Special Forces and the Falklands conflict")

Truly, the patrol sent a report to confirm the targets on the first possible occasion to gain some access of the target, thus achieving relative certainty. All information after improved the relative certainty and refinement of the raid plan. Operation Plum Duff never accessed the target area or achieved relative certainty, and therefore the mission was unsuccessful.

2. Overall Context

On 2 April 1982, Argentina invaded the Falkland Islands and South Georgia in the South Atlantic. The British response came only four days after the invasion when a

237 For the independent variable for Operations Plum Duff, the mission and intelligence requirements are from Southby-Tailyour, *Exocet Falklands*, 131-132.

joint amphibious Task Group embarked for the South Atlantic to retake the islands (see Figure 3). The concentration of British SOF (Marine and Army) was the largest since World War II. Reconnaissance patrols from (then) Special Boat Squadron (SBS) and Special Air Service frequently inserted on the Falklands from 1 May onwards.

Figure 3. Map of the Countries and Places Involved in South Atlantic War.[238]

The British used submarines to bottle up the Argentinian Navy around the islands. Also, the British depended on two aircraft carriers to gain air superiority over the islands and to conduct an amphibious landing. The planned assault to recapture the islands had to be settled before 25 May, to enable an entire month of land operations before the onset of

238 Adapted from Sandy Woodward, *One Hundred Days* (Annapolis, MD: Blue Jacket Books, Naval Institute Press, 1997). Maps from Google Maps, https://www.google.se/maps/.

winter. However, the Argentinians had a capable Air Force and could use the air bases on the Argentinian mainland.

The most threatening Argentinian weapon was a newer, high-end but untested anti-ship missile, the French-built Exocet missile. There were two types of the Exocet, one land-based and one air-launched carried by the Super-Etendard fighter. However, Argentina had only five planes, which were based at the Rio Grande air base. Also, the Argentinians had just five air-launched missiles, due to an embargo by the French for the British government.[239] The sinking of the destroyer HMS *Sheffield* and later the container ship *Atlantic Conveyor* by Exocet missiles were major blows to the British forces. With that, the Exocet War was well underway.

B. OPERATION PLUM DUFF: RECONNAISSANCE ON THE ARGENTINIAN MAINLAND

It was the Israeli hostage rescue and air-land concept raid on Entebbe in 1976 that formed the idea behind the raid against the Argentinian mainland, named Operation Mikado. Only a couple of months after Entebbe, the SAS and RAF conducted a similar exercise. Also, NATO air base defences were tested using the same air-land concept at the beginning of 1982, with mixed results. While SAS saw the success, the RAF was more skeptical, since radar had always detected the C-130s.[240]

1. General Situation

Already in the beginning of the war, the SAS wanted to air-land at Port Stanley in a “coup de main” to retake the town and the island. Port Stanley is the main town and at the time garrisoned most of the Argentinian forces. As an alternative, the SAS wanted to drop reconnaissance teams on the islands to establish situational awareness. The SAS conducted several rehearsals of air-land missions and parachute infiltrations in early April 1982.[241] However, the C-130s were then not fitted with air-to-air refuel probes, so no aircraft could reach the islands. Also, the commanding officer of the SAS and two

239 Southby-Tailyour, *Exocet Falklands*, 23.

240 Ibid., 17.

241 Ibid., 91–98.

SAS squadrons left with the Naval Task Group to the Falklands on 6 April, and left the headquarters in Hereford to plan for contingencies. The director of SAS, the commanding brigadier of all the SAS regiments, took control of the planning and the SAS forces still in the UK.[242] The director's mission was to work with the overall Task Force headquarters in Northwood and the Ministry of Defence (MOD) in the United Kingdom.

a. Operational Context and Origin of Operation Mikado

The hastened planning of the raid began after the attack on the destroyer HMS *Sheffield* on 4 May. The director of SAS wanted to do something against the Exocet missiles, and an outline of a two-phase operation emerged on 6 May.[243] First, there was a need for a reconnaissance patrol to collect intelligence on the prime target, the Rio Grande air base, and to set the conditions for an air-land operation (see Figure 2). This mission was called Plum Duff. It required an eight-man reconnaissance-fighting patrol from a squadron still in Great Britain, because the British did not have any intelligence on the target. And if no other alternative presented itself, the patrol would be able to strike at some of the targets.

The second phase, Operation Mikado, was the raid using the rest of the squadron. According to Ewen Southby-Tailyour, the target priority order was the Argentinian pilots, the Super-Etendards, the Exocets and time allowing the maintenance and support personnel.[244] The planning was conducted without the RAF Special Forces Flight since they took part in the test runs of the air-to-air refueling as well as for OPSEC reasons. In the beginning, the MOD was aware of the reconnaissance operation, but the Task Force commander in Northwood and the Task Group commander in the South Atlantic were not.

242 Ibid., 18, 38.

243 Ibid., 88, 111.

244 Ibid., 131.

2. The SR Mission and the Planning

The original plan called for two reconnaissance patrols of four men to be inserted by boat, submarine, or helicopter. One alternative for insertion was from the west over Chile. However, when Rio Grande eventually was confirmed, the two patrols formed one reconnaissance-*fighting* patrol [emphasis added]. Therefore, the patrol took extra ammunition, explosives, and only four days of food.

According to Southby-Tailyour, the director of SAS assigned the mission "to identify the location of the enemy aircraft and, if possible, *destroy* [emphasis added] them."[245] Eventually, the patrol was transported via Ascension Island to the Naval Task Group outside the Falklands by C-130 on 16 May. Eventually, the patrol parachuted into the water in wetsuits instead of dry suits.

The planning before the insertion to the Atlantic had not been up to the regular standards. There had been no timings or intelligence briefing, and the paragraphs on enemy forces, ground or friendly forces had been blank. The patrol got two maps, stolen from a book. One map was dated 1943 with a scale of 1:100,000.[246] There had been no details about friendly contacts in Chile. The patrol was expected to escape and evade 50 kilometers to neutral Chile after the mission. Southby-Tailyour asserts that the patrol commander thought that "someone in the SIS [Secret Intelligence Service] must know. … Someone from the Royal Navy or the RAF must have visited [the air base]."[247] Also, until the patrol reached the aircraft carriers in the South Atlantic, the insertion method was unknown. Further, it was just a bonus if the reconnaissance patrol could carry out its mission without detection.[248]

It became clear the equipment was not packed in waterproof containers after the pick-up by the aircraft carrier HMS *Hermes*. Almost immediately, the captain of the ship announced the patrol was to be inserted by a modified helicopter on a one-way flight the

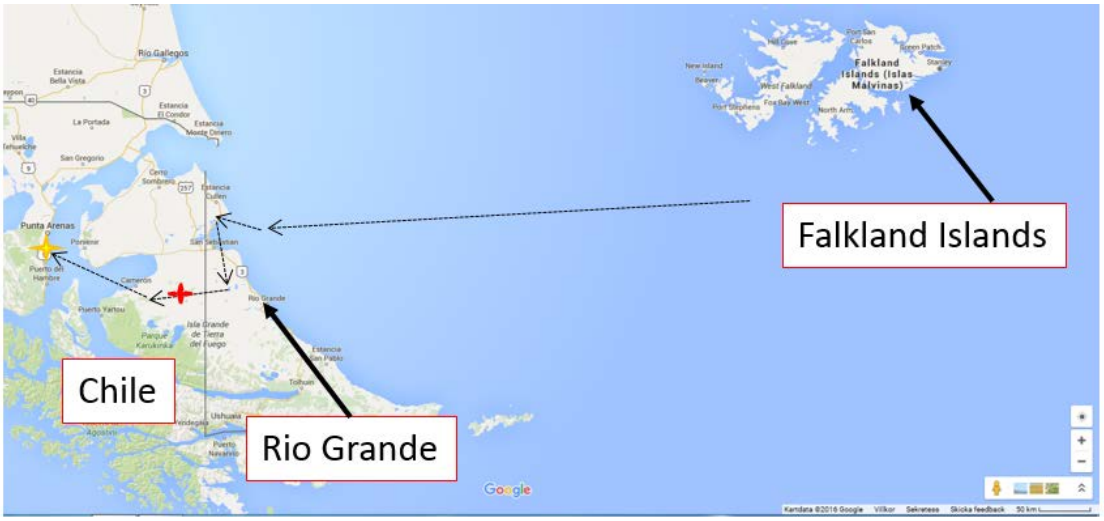
245 Southby-Tailyour, *Exocet Falklands*, 132.

246 Ibid., 131–34.

247 Ibid., 137.

248 Ibid., 141.

same night. Later in the evening on the 16 May, the newly volunteer helicopter crew and the patrol commander met for the first time. However, it was an experienced aircrew. The members had conducted several insertion and extraction missions of SOF patrols on the Falklands.[249] Finally, the insertion was carried out on the night of 17/18 May. Once the patrol was dropped, the helicopter would continue to Chile and then be abandoned and destroyed. The crew would stay hidden for at least five days because it was assessed that by then the whole raid on Rio Grande would have been completed (see Figure 4).[250]



Rio Grande is marked in comparison to the Falklands. The arrows show the estimated route taken by the helicopter. The red star shows roughly where the patrol started to infiltrate from Chile. The yellow star is near where the helicopter finally landed.

Figure 4. Overview Map for Operation Plum Duff[251]

a. The Execution

The helicopter insertion was eventful. The fog made it difficult to navigate. Once over the mainland, the helicopter continued to fly low and slow to evade radars, but the fog made it almost impossible to continue. The navigation system drifted, so the crew

249 Richard Hutchings, *Special Forces Pilot: A Flying Memoir of the Falklands War* (Croydon, England: Pen & Sword Aviation, CPI Group, 2014), 125–27.

250 Ibid., 152.

251 Adapted from Southby-Tailyour, *Exocet Falklands*, 191. Maps from Google Maps. https://www.google.se/maps/

was not sure of the exact position. The SAS patrol had seen flares and assessed that their position was compromised. After the war, it became clear that Argentine ground forces had heard the helicopter, and the security in the region, as well as at the air base, were put on high alert.[252]

The rational decision by the patrol commander was to continue to one of the emergency drop-off points and start the mission from there. However, a fire control radar lit up for a couple of minutes when the helicopter lifted again. The crew, unknown to the patrol commander, made the decision to continue over the border and above the fog. Eventually, the patrol was dropped over 90 kilometers from their objective at an alternative landing site in Chile. The patrol, unanimously, decided to continue the mission and began a slow foot infiltration towards the East. A sick patrol member, as well as the cold and rugged terrain, stalled the infiltration.[253]

Eventually, the patrol contacted the HQ in Hereford, 12,800 kilometers away, and was ordered to move forward despite the difficulties. On the 21 May, still 70 kilometers from the objective and 16 kilometers from the border, the patrol commander asked for an air-resupply before they continued in Argentina. However, the patrol was told to move to an emergency rendezvous (ERV) point where they would meet an SAS officer attached to the embassy in Chile.[254] This information was the first time the patrol was aware that this contingency existed. Meanwhile, the planning of the raid continued in the UK, much to the frustration of the staff since the SR patrol had not reached the objective.[255]

Eventually, on 20 May, Chilean authorities announced the helicopter was discovered. However, it was without the crew. The British issued their cover story that a Sea King helicopter was indeed missing. It had been lost during a routine mission, and was assumed to have had an engine failure or to have suffered from severe weather.[256]

252 Southby-Tailyour, *Exocet Falklands*, 183–84.

253 Southby-Tailyour, *Exocet Falklands*, 193.

254 Ibid., 195–96.

255 Ibid., 196.

256 Southby-Tailyour, *Exocet Falklands*, 196; Hutchings, *Special Forces Pilot*, 172.

Eventually, the aircrew took evasive actions, until they gave themselves up to Chilean authorities on the 25 May. After a press conference, the crew was flown to London.[257]

Meanwhile, the SR patrol continued to an alternative ERV. It was not clear from the maps (no grid references) where the actual ERV was and where the patrol was. Eventually, the patrol reached the ERV and waited at the allotted time windows for four nights. There was no communication with the HQ or the liaison officer in Chile. Finally, the patrol commander and a patrol member put on civilian clothes and decided to hitchhike to the nearest town, 80 kilometers away, to call an emergency number for the British consul in Chile. Telephone contact was made, but the advice given was to surrender to the Chilean authorities. However, soon after, the patrol commander stumbled into the SAS contact by sheer luck. The patrol was reunited on the night of 26/27 May and was soon taken to a new safe house.[258]

Again, the patrol was ordered to go across the border. Operation Mikado was still valid since an Exocet had hit the *Atlantic Conveyor* on 25 May. Only one air-to-surface missile remained. However, the director of SAS wanted the missile destroyed. However, the political backup had now stopped. The failure of Operation Plum Duff was domestic SAS business.[259] At the same time, the SR patrol understood the Chilean authorities had found the helicopter and the crew, and the discovery had been internationally announced. Also, the patrol understood that nearly 2,000 Argentinian troops were deployed in and around Rio Grande.[260] The conditions for a clandestine mission did not look promising. Eventually, no further actions were taken, and the patrol left Chile on 8 June.[261]

b. General Analysis

What has become clear in wars when conventional forces share the battlefield with SOF is the need to deconflict and coordinate. This war proved to be no exception.

257 Hutchings, *Special Forces Pilot*, 177–81.

258 Southby-Tailyour, *Exocet Falklands*, 201.

259 Ibid.

260 Ibid.

261 Ibid., 202.

Several coordination elements for special operations were hastily set up. However, the SAS representative at the Task Force level at Northwood was sent early on to Chile, allowing SAS to have a representative in South America. The SAS Tactical Headquarters at the Task Group stayed in contact via new satellite radios with SAS Main HQ in Hereford and with the director of SAS in London next to the MOD. Thus, the SAS conducted planning and operations without the insight of the Commander in Chief of the whole Task Force in Northwood.[262]

The SR patrol commander came under severe pressure for his decisions, and he decided to leave the armed forces. Earlier, the commanding officer and the sergeant major of the SAS squadron tasked with Operation Mikado were fired. They spoke out against the risky raid. But several sources assert that Operation Mikado would never have happened. The political climate would never have allowed this.[263] However, it was not until 3 June that Operation Mikado was canceled officially.[264] The reconnaissance and fighting patrol continued to plan for Operation Plum Duff until it left on 8 June.

Among the areas Southby-Tailyour critiques are the lack of a feasibility study and the "security bubbles" surrounding the SAS.[265] In addition, the SAS was not used to working with conventional troops. And conventional forces had no experience in working with SAS. Until this war, the SAS had conducted counterinsurgency and counterterrorist operations.[266] In addition, the C-130 aircrews and the helicopter crew were not fully integrated into the planning.

However, it was understandable and suitable for SOF to assume the intelligence role, mainly due to the lack of intelligence of the target area, and in the absence of the intelligence service focus on the Exocet threat in Argentina. However, the operational planner and the unit did not pay attention to principles of SR.

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262 Ibid., 38.

263 Southby-Tailyour, *Exocet Falklands*, 274.

264 Ibid., xxviii.

265 Ibid., 276.

266 Ibid., 275.

3. The Use of SR Principles and SR Theory

Coordination: The planning and most of the preparations took place in Great Britain. The patrol could not coordinate with the aircrew for the infiltration or with a backup force. Because of the target area and decision not to involve more units, the headquarters did not plan for a backup force. There is no suggestion of coordination between the SR patrol and the intelligence services while still in the United Kingdom. The coordination came only after the patrol was parachuted in to the Atlantic and picked up by the Naval Task Group. Only then could the various planning elements complete the real target analysis, planning, and coordination. In the United Kingdom, the planning and the preparation process were characterized by stove piping, compartmentalizing, and top-down driven authoritarian way of command.

Review: Top SOF leadership overruled alternate ways of infiltration, such as helicopter and foot from Chile. The helicopter crew only conducted a review of the infiltration and circumstances during the insertion. However, this led to the SR patrol being dropped off too far from the objective. Moreover, because of the operational security the SR patrol could not get updated lessons learned from squadrons already operating in the area. The risk assessment was absent or not thought through since the patrol was going to Argentina *no matter the stakes*.

The compromise plan and the escape and evasion plan were rudimentary. The only contingency planning was the change from a reconnaissance patrol to a reconnaissance-fighting patrol, which is an understandable decision. This decision connects to the exploitation principle. However, changing the nature of the mission and adding a task to the patrol meant the patrol eventually needed to plan and carry out an airfield raid themselves without support. Therefore, the focus from radios, batteries, and SR equipment shifted. It was superseded by the ability to conduct a direct action.

In sum, the review principle was not considered. Instead, circumstances, the authoritarian execution of command and control, shifting focus and priorities, and the events unfolding during the execution of the mission contributed to mission failure.

Cover: The focuses of the mission were not to be compromised, and not to let the Argentinians understand the whole purpose of the operation. At first, one patrol of four men was directed to conducted reconnaissance on Rio Grande. Another four men patrol would focus on Rio Gallegos. The two patrols merged into one patrol once Rio Grande was determined to be the target. An eight-men SR patrol would have been easier to detect than a four-men SR patrol. However, an eight-men patrol can have some advantages in terms of security and sustainment. The focus shifted from a pure SR patrol to conducting a raid, thus requiring even more equipment for a raid. This action neglected the early idea of sending an SR patrol in the first place.

An experienced flight crew performed the insertion. The crew understood SOF flight profiles and use of terrain. Eventually, circumstances and a decision made by the flight commander forced the SR patrol to conduct a much longer foot infiltration than expected. It is unclear whether that was a planned contingency or whether events overtook the decision. The SR patrol had taken all precautions to "strip" recognizable uniform, which can be risky if caught and seen as a spy and not a combatant. The patrol had brought civilian clothes in case of the possibility of escape and evasion to Chile or being able to blend in civilian society in Argentina. Rudimentary contact details were issued. The lack of a thorough cover for the SR patrol and contingency plans became clear in the several attempts to communicate with the SAS liaison officer in Chile.

There were no cover or extraction forces, which this study considers acceptable due to the target and the distances. At the same time, the nature and importance of the mission should have allowed for a backup force of sorts, if the patrol did not reach the target or was compromised. Because of the change of mission statement to include "fighting," equipment for cover and concealment had to be abandoned. In short, the principle of cover was not considered or used to a greater extent by the SR patrol or the planners.

Reporting: The SR patrol had only one radio set, which also had been affected by the water drop in the Atlantic.[267] The radio was issued and provided hastily by the

267 Southby-Tailyour, *Exocet Falklands*, 156, 194, 198.

Americans. Therefore, a thorough training was ruled out. The patrol made contact during the foot infiltration soon after the emergency drop in Chile. However, this was only a situation report, on 18 May, letting the headquarters understand the conditions on the ground, and the difficulties ahead since the patrol had a long way to cover to the target. The radio transmission on 20 May, suggested to the patrol, that despite authenticating their identity, the headquarters thought the patrol had been captured.[268] On 21 May, the patrol asked for resupply before entering Argentina. However, then the patrol was to contact an SAS liaison officer at an ERV. After that contact, the communications stopped working, and it was not until 26 May that the patrol commander made contact with the liaison officer.[269]

During Operation Plum Duff, only situation reports reached the headquarters. The command, control, communication, and reporting procedures and the evidence pointed to the Task Group in the Atlantic was not part of the reporting chain.

In short, only one radio set and other events suggest the principle of reporting was not used. However, one can assume that whenever the patrol reached the target area, reports would be sent to higher command. On the other hand, if one considers the poor communication and contacts during the foot infiltration, it is dubious that the SR patrol could have achieved relative certainty. The poor communication, lack of time, and the detailed priority list provided by HQ SAS would most likely not contribute to an accurate and timely intelligence report.

Exploitation: The exploitation principle was used to a certain extent with the shift from an SR patrol to a reconnaissance-fighting patrol. Taking measures to ensure the possibility of exploiting a situation is necessary. However, if one considers the circumstances and the equipment at the time, this principle was not fully considered. This action caused more problems for the patrol, and the purpose became unclear with a skewed focus on direct action.

268 Ibid., 195.

269 Southby-Tailyour, *Exocet Falklands*, 198, 200.

Also, it is unsure what the role of the SR patrol would be in the execution of Operation Mikado. To close this part, Operation Plum Duff never achieved relative certainty. There was not sufficient intelligence or actionable intelligence to make an informed decision. If the decision to carry out the raid had been made, it would have come with a great risk to the mission and force. The intelligence was never developed at more than the trend level, although due to the lack of intelligence, perhaps, the decision not to carry out the raid was made (see Figure 5). But the SAS, in particular, its director, fought for a major strategic role for the SAS. However, the director did not let the policy makers nor the higher headquarter nor the unit be part of the planning and preparation process. This mission and case study represents an unsuccessful SR case. Nonetheless, the SAS executed a successful SR operation and that is the focus for the next study.

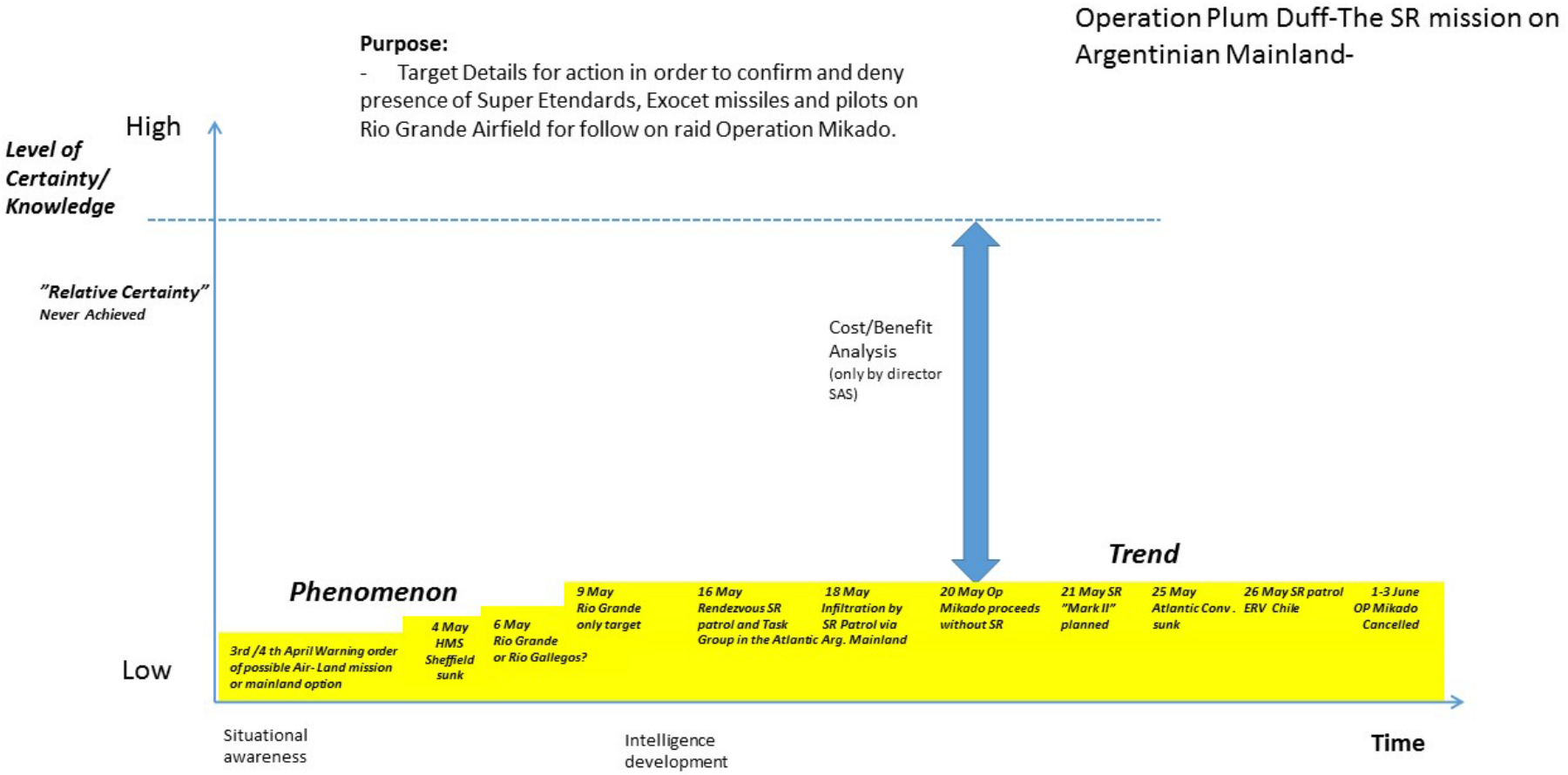

Figure 5. Relative Certainty for Operation Plum Duff

C. OPERATION PRELIM: THE RECONNAISSANCE AND THE FOLLOW ON RAID ON PEBBLE ISLAND

The SAS and the Naval Task Group planned and executed another operation to eliminate a threat to the British amphibious landing, Operation Prelim.

1. Operation Context and Origin of Operation Prelim

After the Argentinian invasion of the Falkland Islands, the Argentinians set up smaller forward operating bases. The purpose was to seize key terrain and hinder the expected landings of the British forces. One of the more important forward operating bases was Pebble Island just north of West Falkland, which was the only major base on West Falkland (see Figure 6). There were a small harbor and three grass airstrips at the small civilian settlement of Pebble Island. Eventually, around 150 Argentinian troops and 11 different kinds of military fixed wing aircraft were located at the settlement.[270]

At the beginning of May, British Harrier pilots had noticed air activity and radar emissions from the north shores of West Falkland. The British used electronic intelligence and air reconnaissance to identify Pebble Island as a possible forward operating base. If the Argentinians had airplanes in the area, then this posed a major threat to the planned amphibious landing and beachhead on East Falkland.

270 Royal Air Force, "The SAS Raid on the Airfield at Pebble Island: 14th May 1982," accessed December 1, 2015, http://www.raf.mod.uk/history/TheSASraidontheairfieldatPebbleIsland.cfm.

Figure 6. Overview Map for Operation Prelim.[271]

The landing was scheduled in the 16–25 May time frame.[272] However, the British had scarce resources for air-ground attack, and naval bombardment needed observers on to assess targets and direct fires. Therefore, the task to destroy the airplanes and as much as possible of the Argentinian garrison went to a squadron from 22 SAS. Also, the British Task Force in Northwood wanted to remove any threat of surface to surface coastal missiles and radars in the area.[273] The squadron sent a reconnaissance patrol to Pebble Island to fix the targets and confirm the presence of airplanes, and to prepare and act as the "trigger" for the execution and the follow-on raid.

2. The SR Mission and the Planning

On 7 May, SAS D-Squadron got a warning order of a raid operation to be carried out as soon as possible. They got the warning order after the confirmation of a radar signature on Pebble Island.[274] The squadron's Boat Troop got the SR mission of the

271 Adapted from Woodward, *One Hundred Days*, xxviii. Maps from Google Maps. https://www.google.se/maps/.

272 Woodward, *One Hundred Days*,196, 199.

273 Mackay and Cooksey, *Pebble Island*, 49.

274 Woodward, *One Hundred Days,* 200.

airfield. A small backup force of patrols came from the same troop.[275] The rest of the squadron got the task to prepare for the raid. Of note, the same troop and squadron had been involved in the recapture of South Georgia west of the Falklands, less than a month before.[276]

The plan was to have at least two SR patrols airlifted in by helicopter to West Falkland. One patrol or part of that patrol was to conduct static surveillance of the target area from a distance and confirm the presence of Argentinian troops at the beach site (see Figure 7).[277] This action would be followed by an insertion with canoes the coming night. Another part of the same SR patrol would look for possible helicopter landing sites for the follow-on-insertion by the rest of squadron.

The second SR patrol performed the static and close-target reconnaissance of the airfield, and the settlement of Pebble Island. Both force elements would conduct reconnaissance of the area to find possible more threats or enemy forces. The team that was to watch the airfield would also conduct a detailed planning of the raid with a focus on rendezvous points and fire support positions.[278] The whole squadron, including the SR troop attended briefings including recognition of aircraft, radars, and air defense systems as well as other support functions, which could be found close to a military airfield.[279] Eventually, the SR troop inserted on 11 May.

a. The Execution

The Argentinean air-defense on the Falklands noted the night insertion.[280] However, no resistance met the troop as it infiltrated by foot, carrying canoes to a laying up position. This over watch position served to observe both their intended beach landing site and the airfield from nearly 12 kilometers away. The troop spent two days of

275 Mackay and Cooksey, *Pebble Island*, 58.

276 Royal Air Force, "The Recapture of South Georgia," accessed December 1, 2015, http://www.raf.mod.uk/history/TherecaptureofSouthGeorgia.cfm.

277 Mackay and Cooksey, *Pebble Island*, 51–70.

278 Ibid., 57.

279 Ibid., 63.

280 Ibid., 59.

observing the target area and recorded Argentinian flight activity (see Figure 7). On the night of 13 May, the team with the task to reconnoiter the airfield and settlement infiltrated Pebble Island by canoe and landed roughly 6 kilometers from the target area.[281] A small detachment was left behind to guard the landing site, confirming the terrain and the helicopter-landing site for the raiding party, and acted as a backup force for the team at the airfield. The main section continued forward to the airfield and the settlement.

On the first night, the patrol could already confirm most of the locations of the airplanes, and that the aircraft were real and not part of a deception.[282] During the next day, the SR patrol observed and recorded the Argentinian activity, positions of the troops, avenues of approaches and withdrawals, weather and terrain, obstacles, houses, support facilities, storages, and the airplanes. The observation post was located about 2.5–3 kilometers away from the target (see Figure 7).[283] From the intelligence collected, the commander of the reconnaissance team developed a detailed plan and sent it to his headquarters. This plan, with the intelligence of the targets, the terrain, and the Argentinian defenses, formed the assault plan including the use of naval gunfire support and helicopter assets. It was also the foundation for organizing the rest of the squadron for the raid.

281 Ibid., 60.

282 Mackay and Cooksey, *Pebble Island*, 62.

283 Ibid., 63.

The red star marks the airfield. Position placements were estimated by the author.

Figure 7. Pebble Island and an Overview of the SR Mission[284]

b. General Analysis: The Raid and the Aftermath

On the early morning of 15 May, with H-hour set to 0630 hours, helicopters carrying the rest of the assault force landed. The SR troop guided the force in (see Figure 7). The total force consisted of around 45 men. The target area was under constant observation of a small SR team during the unloading, formation, and last minute briefings by the leader of the SR troop. The reconnaissance patrols' role in the raid was to guide the assault force to the objective and to cover the civilian houses. During the withdrawal phase, the SR patrol would cover the assault force back to the helicopter-landing site.[285]

At 0722 hours, the assault force, supported by the squadron's mortars and naval gunfire, attacked with explosive charges, antitank weapons, and small arms, and destroyed or made all 11 aircraft ineffective. In addition, an ammunition storage was demolished. Demolition charges purposely disrupted the airfield, and a small counterattack by the Argentinians was fended off. During the raid, two SAS soldiers were

284 Adapted from Mackay and Cooksey, *Pebble Island*, 58. Maps from Google Maps. https://www.google.se/maps/.

285 Mackay and Cooksey, *Pebble Island*, 75–76.

slightly injured. After nearly 40 minutes, the raid was over, and the force had been picked up by the returning helicopters close to the mortar fire support position.[286]

The raid was a considered a success. The air threat to the British amphibious landing was reduced. Also, the indirect effect created by the British SOF, proving the skill and capacity to strike or conduct raids all over the Falklands had presumably a psychological effect on the Argentinian forces. However, the use of a squadron-sized assault force was not the custom for the SAS at the time, even during exercises. This raid was the largest raid or attack by the SAS since World War II. The raid's execution largely applies to McRaven's principles of speed, purpose, and surprise. The plan was simple, and standard raiding tactics were used. The number of targets was clearly defined because of the detailed intelligence provided by the reconnaissance patrol. The innovation contributed was the use of naval gunfire support with overwhelming fires compared with the Argentinians.

On preparations, the squadron had already been in enemy contact. The squadron took part in the recapture of South Georgia. Therefore, this study asserts that the squadron was better prepared than the small Argentinian Air Force garrison at Pebble Island. There were at least five days of preparations and rehearsal including helicopter drills before the raid.

However, security was not satisfactory. The helicopter infiltration by the reconnaissance team alerted the Argentinian forces. Also, an unknown event of a use of a flare bothered the Argentinians.[287] These events could have had a potential risk to the whole raid. The Argentinians had dedicated units for hunting and tracking British SOF on the Falklands, including Pebble Island.[288] However, the Argentinians took no action. But the alertness of the forces in the area increased.[289]

286 Ibid., 74–84.

287 Mackay and Cooksey, *Pebble Island*, 60.

288 Ibid., 46.

289 Ibid., 59.

Furthermore, the source material suggests another contributor to the surprise of the attack was that civilians in the settlement were contacted by the SAS before the raid. The purpose was to have at least one generator on during the raid. The sound of the running generator obscured any noise and movement of the British raiding force. Usually, the generator was off during nighttime.[290] With this last observation, the chapter turns to the analysis of the SR mission for Operation Prelim.

3. The Use of the SR Principles and the SR Theory

Coordination: The study asserts that coordination was used during the planning and preparation phase for the SR troop since the SAS was integrated into the Naval Task Group and acted on its behalf. The planners and aircrews discussed infiltration and exfiltration alternatives using ships, inflatable boats, and helicopters. Furthermore, the unit had developed escape and evasion plans. Also, the use of a troop from the same squadron that had the main raiding task made the coordination more efficient. The team leaders and the command group all knew one another. The SR troop discussed the intelligence requirements and reporting procedures. This action is obvious when the patrol sent a "flash" report to the staff with the findings and confirming the aircraft at the airfield. Part of the constant coordination was the reports and the plan developed by the leader of the SR team, which was sent back to his headquarters for further refinement. Also, coordination was conducted by the SR commander at the latest point when briefing and finally guiding the raiding force to the target area.

Review: The team continually reviewed the infiltration approaches and means, much depending on the weather forecast and reports. Once the team was inserted, it took the time to conduct an over watch and conducted a pre-reconnaissance of the named area of interest. This action was before the infiltration to the target and serves as evidence of continually reviewing of alternatives, refining alternatives, and assessing the situation.

Cover: The use of cover stands out in several aspects. There were several layers of cover. The rest of the troop that was not conducting the SR mission had the task to act as a recovery and support force, launching in helicopters from ships, if needed. Also,

290 Ibid., 91.

naval ships had the task to support with gunfire if the reconnaissance team was compromised. Once at Pebble Island, cover and protection were a priority. The patrol left two guards at the helicopter-landing site and the beach-landing site to protect the withdrawal and provide any support needed. The reconnaissance team used the bad weather for concealment. Another reliable source suggests that certain observation post materials were used on the Falklands as standard procedure, for instance, camouflage nets that could be augmented and covered by earth from the environment.[291] Nothing rules out the possibility that the SR team used the same technique at Pebble Island to blend into the surroundings. This sharing of lessons learned could well be true since several reconnaissance patrols from various units shared the same ship to operate from, and there were after action briefings.[292] Finally, darkness and night were used to conduct close-target reconnaissance of the airfield and the settlement and to pinpoint targets and obstacles.[293] In sum, the SR cover principle was widely employed by the SR team and the planners.

Reporting: Mackay and Cooksey claim the reporting of various findings was outstanding and detailed. It is not clear what radio equipment the SR team used, but high frequency radios were used at the time. However, satellite equipment may have been issued, as with Operation Plum Duff, confirming on the first night the presence of airplanes at the airfield. The reports of the raid and assault plan suggest that detailed and continuous reporting took place during the SR mission.

Exploitation: It is not stated but inferred that the SR patrol leader had the task to either develop the actual raid plan or just provide recommendations. As portrayed, this serves as a good example of proactivity and exploitation. The patrol did not just report the findings and answer the intelligence requirements. It also had the task to act as a trigger and conduct target surveillance up to the last minute. In addition, the troop administered and marshalled the landing area, and guided the assault troop to the

291 Hugh McManners, *Falklands Commando* (Hammersmith, England: Harper Collins, 2002), revised edition, 117, 125, 134, 204, 214, 237–38.

292 McManners, *Falklands Commando*, 123–29, 151, 166–67, 195–96.

293 Mackay and Cooksey, *Pebble Island*, 65.

objective. Also, the team had the task to be the cover force during the withdrawal phase. The team did not just answer and report the findings of the airfield. The troop also nominated Argentinian targets near and far from the airfield with the purpose of being destroyed by the naval gunfire during the raid.

Besides, if the story of the civilian supporting the raid with noise from the generator were true, than someone from the reconnaissance team would most likely have been in contact with the civilian asking for this support of the execution of the raid.

In sum, the mission achieved relative certainty. The very first observation of some air activity from a distance would allow a launch on a partially fixed target, although this would have been conducted with a certain risk. However, on 13 May, the SR patrol accessed the target area and could provide details confirming the airplanes were real and that the airfield was in use (see Figure 8).

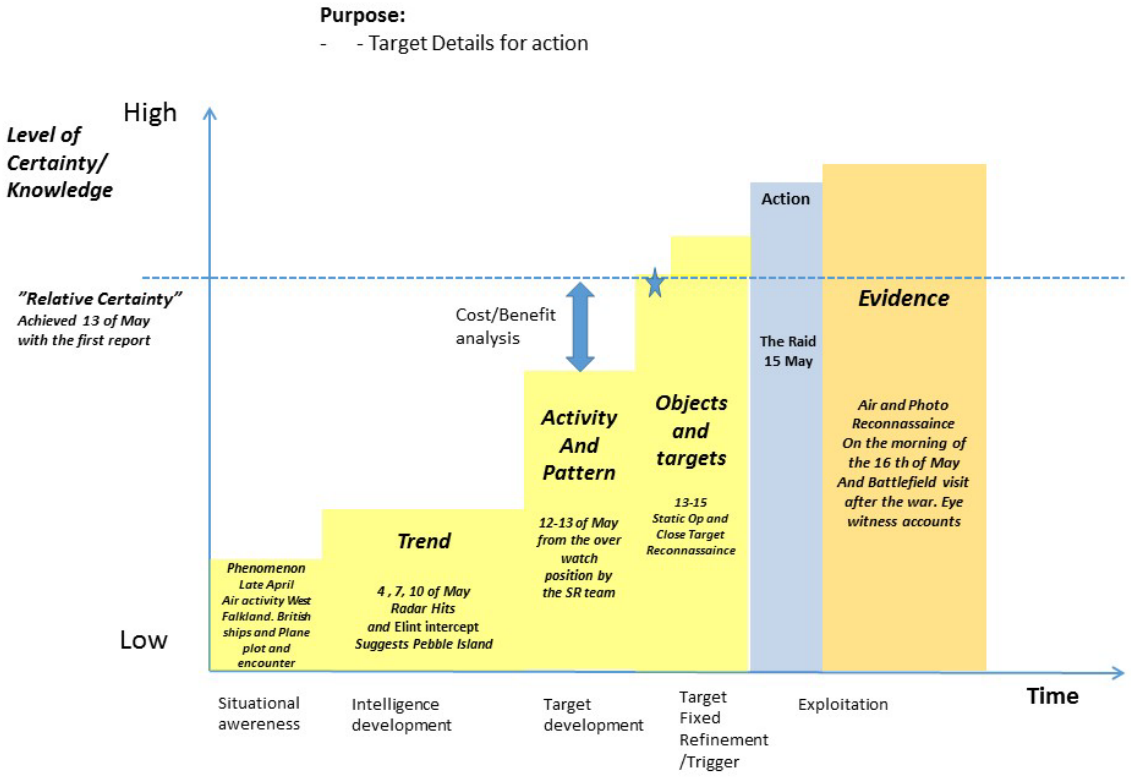

Figure 8. Relative Certainty for Operation Prelim

D. CASE STUDY CONCLUSIONS

The overall SAS campaign in the Falklands, in an era of no ISR technology, used, at first, one squadron to collect intelligence on the islands and one squadron to prepare and conduct raids against targets fixed by actionable intelligence. The Tactical HQ planned these missions closely integrated with the Naval Task Group commander, and the commander of UK 3 Commando Brigade. The events and actions described by Southby-Tailyour and the use of a third squadron based in the United Kingdom suggest that Operation Plum Duff and especially Operation Mikado were not nested with the overall campaign.

It would have been expected of UK SOF to put forward a plan and contribute to destroying the most dangerous threat from the Argentinians. However, the SAS, still in the United Kingdom, tried to be independent. This observation was also clearly stated by the overall land forces commander Major General Moore, "They [the SAS] were conducting conventional reconnaissance tasks in support of conventional forces in a conventional campaign, and as such were (or should have been) an assimilated part of the whole."[294] Of note is that Operation Prelim was more or less time-based and Operation Plum Duff more trigger-based. Timing is important, but usually, trigger-based operations are preferable compared with time-based operations. It may be difficult to collect the information required and have the target fixed within a certain time frame.

Also, clearly identified starting points and some basic intelligence to start the planning are useful for SOF. Almost no information or intelligence was provided to the patrol during the planning phase in Operation Plum Duff. It would be valuable to have a rapid lesson learned and reach ability to disseminate observations and experiences identified during a campaign. Also, Operation Plum Duff was more or less planned from an SAS top-down perspective. The patrol did not take part in the planning process until the insertion phase. This contradicts the normal modern SOF planning process. Therefore, this operation tends to go with Vandenbroucke's conclusions that the failure of special operations depends on "faulty intelligence, poor interagency and Interservice

294 Southby-Tailyour, *Exocet Falklands*, 275.

cooperation and coordination, inadequate information and advice provided to decision makers, wishful thinking, and over control of mission execution from afar."[295] Operations Plum Duff and Mikado fall into this category.

While Operation Prelim that supported the operational level provides an example of proper use of the principles of *coordination*, *review*, *cover*, *reporting*, and *exploitation*. All the principles were present and employed in Operation Prelim. During Operation Plum Duff, the principles of SR were either not present or used to some minor extent (see Table 4).

Relative certainty was achieved in Operation Prelim. In Operation Plum Duff, the reconnaissance patrol did not reach the target after two unsuccessful attempts.

295 Lucien S. Vandenbroucke, *Perilous Options: Special Operations as an Instrument of U.S. Foreign Policy* (New York: Oxford University Press, 1993), 8.

Table 4. Comparison of the Two SR Operations

Operation / Controllables	Op Prelim	Op Plum Duff	Comments
Coordination	With several elements within the Task Force, Raid Force from the same Squadron	Stove piping, compartmentalized No chance by getting latest lessons learned from theatre	Foremost in the Planning phase, but also in execution phase
Review	Change of infiltration method and use of Overwatch postions	Overruled by higher command, No chance by getting latest lessons learned from theatre. Not focused on SR, rather on direct action	Preparation to Execution phase
Cover	Multiple layers of Cover, Back up and Reserve, E&E plan	Larger detectable force but feasible because of the direct action task, no uniform of recognizable force. Poor E&E plan (Good for Helicopter Crew)	Execution phase
Reporting	Sent intelligence reports continously.	Intermittent situation reports, some radio contact, doubtful authentication	Execution phase
Exploitation	Raid plan, and role in the raid as well as pathfinders/marshalling force	Fighting patrol instead of SR patrol	Execution phase
Relative Certainty	Achieved, Successful	No Actionable Intelligence, Unsuccessful	Meeting the threshold of sufficient intelligence (actionable or not) for decision making

Green: Principle used; Yellow: Somewhat used; and Red: not used or Unsatisfactory.

The South Atlantic War of 1982 is well known and documented. The missions conducted by the various elite and special forces during this war are also known. Another equally known war is the Korean War and a notorious part of that war is the Inchon landing in 1950. However, a less studied part is the special reconnaissance and preparation that took place before the landing. That is the subject of the next case study of this research.

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V. CASE STUDY: SR MISSION, OPERATION TRUDY JACKSON, THE INCHON LANDING 1950

A. INTRODUCTION

An interesting case study is the intelligence collection and support to the Inchon landing, Operation Chromite, in September 1950.[296] The reasons for this selection are the clearly defined objective, time span and the measureable effect of the intelligence collection and the decision made by the General MacArthur. Also, the collection methods used by the SR team are representative for SOF and in some cases even further advanced than in the study of the SAS missions. Usually, the experiences of SOF related SR missions are land focused. Therefore, it is interesting to study the employment and application of the collection methods in contested littoral environment with a support to an operational, even strategic, level of war.[297] History regards this high-risk and well-documented amphibious landing as one of the most successful in history.

A specially selected U.S. Navy officer, Navy Lieutenant Eugene F. Clark, supported by two South Korean officers and small indigenous and irregular forces conducted the intelligence collection and the battlespace preparations for the amphibious assault.[298] This particular part of the landing was called Operation Trudy Jackson. Clark was an experienced geographic and intelligence officer, a former commander of a landing

296 The spelling of Inchon and the island of Yonghung-do, subjects for this thesis, varies with different sources. This thesis uses the name Inchon and Yonghung-do in accordance with the main source Eugene F. Clark, *The Secrets of Inchon: The Untold Story of the Most Daring Covert Mission of the Korean War* (New York: Penguin Putnam, 2002).

297 Another interesting and comparable campaign to study in particular is the operation conducted by Sino-American Cooperative Organization (SACO) under a joint command of General Tai Li and (then) Captain Milton E. Miles (US Navy) during World War II. SACO was a Chinese and American cooperative effort to collect intelligence and conduct guerilla warfare on the Japanese. See Milton E. Miles, *A Different Kind of War*, (Garden City, NY: Doubleday & Company, 1967). Comparable cases with the use of indigenous forces are also the Coastwatchers on Guadalcanal and Solomon islands during World War II. See Martin Clemens, *Alone on Guadalcanal*, (Annapolis, MD: Bluejacket Books, 2004); Walter Lord, *Lonely Vigil*, (Annapolis, MD: Bluejacket Books, 2006); A.B. Feuer (ed), *Coast Watching in WWII*, (Mechanicsburg, PA: Stackpoole Books, 2006).

298 Donald W. Boose, *Over the Beach: U.S. Army Amphibious Operations in the Korean War* (Washington, DC: Library of Congress, 2008), 174. Curtis Scaparrotti, "SOCKOR Change of Command," United States Forces Korea, April 17, 2014, http://www.usfk.mil/Media/SpeechesTranscripts/tabid/12695/Article/588010/sockor-change-of-command.aspx.

ship and an amphibious warfare veteran of World War II, where he took part in the amphibious landing on Okinawa. In addition, Clark had been a Japanese interpreter and interrogator for the Japanese war crimes tribunal.[299] Furthermore, he had conducted clandestine operations along the Chinese coastline in support of the Nationalist Communists after the war.[300] At first, Clark was responsible for geographic intelligence within the Intelligence Department of General Douglas MacArthur's staff. But, it was the Far East Command Joint Special Operations staff who sent Clark to collect the needed information on the beach landing area.[301]

Over the years, with the beginning of World War II, the United States has developed a concept called Operational Maneuver from the Sea. One of the cornerstones of this concept is intelligence and the importance of disseminated timely intelligence to the decision makers.[302] The Joint Publication 3-02 regards an amphibious landing as one of "the most complex and difficult of military operations, **intelligence activities must consider all aspects of the operational environment that drives timely and informed decision making** [bold in original text]."[303]

During this particular SR mission, several collection methods were used, including static and mobile surveillance. Also, Clark used a combination of close-target reconnaissance and source handling and interrogation, all within a compressed time span. Of note is that the force performing the missions was a combined and joint unit. It is also interesting to study the use of surrogates as a recruited and lead guerrilla force in the ability of reconnaissance. Also, the result of the SR operation and the effect of the collected information served decision makers in the theater level and the strategic level of war.

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299 Eugene F. Clark, *The Secrets of Inchon: The Untold Story of the Most Daring Covert Mission of the Korean War* (New York: Penguin Putnam, 2002), Kindle edition, 7.

300 Ibid., 4–6.

301 Ibid., 4; Boose, *Over the Beach*, 174.

302 U.S. Department of the Navy, Headquarters United States Marine Corps, *Operational Maneuver from the Sea* (Washington, DC: Headquarters, United States Marine Corps, 1996), 11, 24, http://www.marines.mil/Portals/59/Publications/MCCP%201%20Operational%20Maneuver%20from%20the%20Sea.pdf.

303 U.S. Department of Defense, *Amphibious Operations*, JP 3–02 (Washington, DC: U.S. Department of Defense, 2014), V-1.

The variables in this case study are deduced mainly from Clark's firsthand accounts. Interestingly, no formal orders or intelligence requirements existed. Rather, the high command *asked* Clark to carry out the mission.[304] He was tasked to conduct reconnaissance and confirm the suitability of landing site (see Table 5). The high command entrusted Clark to develop the situation and report his findings. Mostly, the command trusted Clark based on his previous experiences and knowledge. It is a tribute to Clark's ability as special operator and officer.

Table 5. The Variables Identified and Used for the Inchon Case Study

Operation / Variables	Op Trudy Jackson	Comments
Independent	- **To conduct reconnaissance of the Inchon area in preparation of a future amphibious landing on the 15 of September.** - **The priority intelligence requirements were to confirm or deny the possibility and suitability of Inchon as an amphibious landing site, including hydrography and enemies disposition and strength.**	(Boose, *Over the Beach,* 174). **No real intelligence requirements were presented. It was up to Clark based on his prior amphibious knowledge to determine what was required. (**Clark, *The Secrets of Inchon*, 3-5, 22). **Clark was told by his superior officer that "everything in and around that place" was needed.** (Clark, *The Secrets of Inchon,* 3).
Dependent	- **Sufficient actionable intelligence to make decision to follow through with the plan to land forces and open a new front.**	(Clark, *The Secrets of Inchon,* 3-5).

First, this chapter presents the operational context of the whole operation. Second, a description of the SR mission including the planning process follows. Third, the chapter continues with a summary on the execution of the SR mission, a general analysis of the amphibious landing, and an analysis of the use the SR principles with a graph of the SR theory. The chapter closes with an examination of the SR principles and a conclusion.

304 Clark, *The Secrets of Inchon*, 3.

1. Operational Context of Operation Chromite

The North Korean forces had attacked on 25 June 1950 and pushed the U.S.-led United Nations forces to the Pusan (Busan) pocket or perimeter in the southeast of the peninsula (see Figure 9). The situation had become desperate, close to critical, and MacArthur needed to open a new front to threaten the North Korean forces.

Figure 9. Map of Japan and the Korean Peninsula.[305]

The bold choice of Inchon both made sense and did not make sense. MacArthur needed to persuade the Pentagon on the selection of the coast and beach.[306] The coast and port channel are narrow and exhibit severe and unknown tides and hydrography. However, proximity to Seoul and the possibility that the North Koreans did not expect a landing at Inchon, along with a likely envelopment and encirclement of the North Korean

305 Adapted from Gordon L. Rottman, Inch'on 1950 (Oxford: Osprey Publishing, 2006), Kindle edition, loc 26. Maps from Google Maps. https://www.google.se/maps/.

306 Boose, *Over the Beach*, 158–61.

forces, surpassed the risky choice of the landing site.[307] However, Inchon needed to be reconnoitered to confirm or deny the possibility of a landing site.

2. The SR Mission and the Planning

The coastline information was mainly based on Japanese information from World War II, even though MacArthur's intelligence department had already been collecting data.[308] In the months leading up to the landing, the South Korean Navy, supported by other countries' warships, had raided and collected early data on the area and islands around Inchon, as well as other places.[309]

On 26 August 1950, Clark got a short brief and was asked, not ordered, to perform a reconnaissance mission of Inchon for a possible amphibious operation.[310] It was not clear whether the landing would take place at Inchon or any other place. The possibility of Inchon was, however, the most likely choice.[311] Already, the date was set for September 15, because of tides and the time needed for preparation of the landing force (two full divisions with support). Some of the reasons were that the tides would come again, with high winds and waves in October, but then it would be too late to land because of the approaching winter and the planned operation that would follow the landing.[312] According to Clark, his superior officers said that "it is essential we [the U.S./United Nation forces] obtain more timely and accurate everything in and around the place-at once."[313]

However, the high command did not present any formal intelligence requirements. It was up to Clark to develop the intelligence requirements, and in particular determine how to get the information.[314] Walt Sheldon suggests that of

307 Boose, *Over the Beach*, 157, 160, 166, Rottman, *Inch'on 1950*, loc 928.

308 Clark, *The Secrets of Inchon*, 4.

309 Boose, *Over the Beach*, 140, 172.

310 Clark, *The Secrets of Inchon*, 3.

311 Ibid., 63.

312 Boose, *Over the Beach*, 158.

313 Clark, *The Secrets of Inchon*, 3.

314 Ibid., 22.

particular interest would be the tide and status of the current, enemy positions, and location of guns and the protected seawalls in the Inchon harbor.[315] Clark started by studying the area, the population, and the enemy positions in and around Inchon. Instantly, Clark realized that he needed to set up a forward base on an island to act from, and he also made an estimation of how much supply the mission needed.[316] After a few days, Clark flew from Tokyo to Korea and recruited two South Korean unconventional and intelligence officers whom Clark had known before.[317] Clark and his small team flow then back to Tokyo for further coordination and some planning, mostly with the higher command of the naval forces. They also started to load all the supplies needed and began the infiltration.[318] Of note is that Clark mentions only himself and the two South Korean officers, while there are suggestions that another force was supporting them.[319] Another unnamed officer and three enlisted soldiers would be part of the team. The sources, including Clark, are inconsistent. It does not rule out the possibility that Clark's force element was actually larger than the three named officers. Another possibility is that this was the headquarters element, in Tokyo, directly in support of Clark's effort, mainly to send, receive, and process Clark's reports.[320]

The SR insertion started with a Royal Navy destroyer sent to Korea for a rendezvous with a small South Korean gunboat vessel on 1 September. During the insertion, Clark continued to examine, estimate, and work on his plan.[321] The small UN navy force, including a cruiser and another destroyer that operated along the west coast of Korea, was ordered to support the mission if needed. The problem was that if something

315 Walt Sheldon, *Hell or High Water* (New York: Ballantine Books, 1968), 6.

316 Clark, *The Secrets of Inchon*, 6.

317 Ibid., 8.

318 Clark, *The Secrets of Inchon*, 11.

319 Robert Debs Heinl, *Victory at High Tide* (Baltimore, MD: The Nautical & Aviation Publishing Company of America, 1979), 67.

320 Ibid.

321 Clark, *The Secrets of Inchon*, 18–19.

happened, the radio that the Clark team had was tuned to Tokyo. In an emergency, the information needed to be relayed to the ships.[322]

The South Korean vessel was placed under Clark's command for the mission.[323] Based on the information provided by the South Koreans on the gunboat, North Korean forces had just withdrawn from an island, Yonghung-do, about 16 kilometers from Inchon. Thus, the island became the forward operating base since it was much closer than the original planned base (see Figure 10).[324]

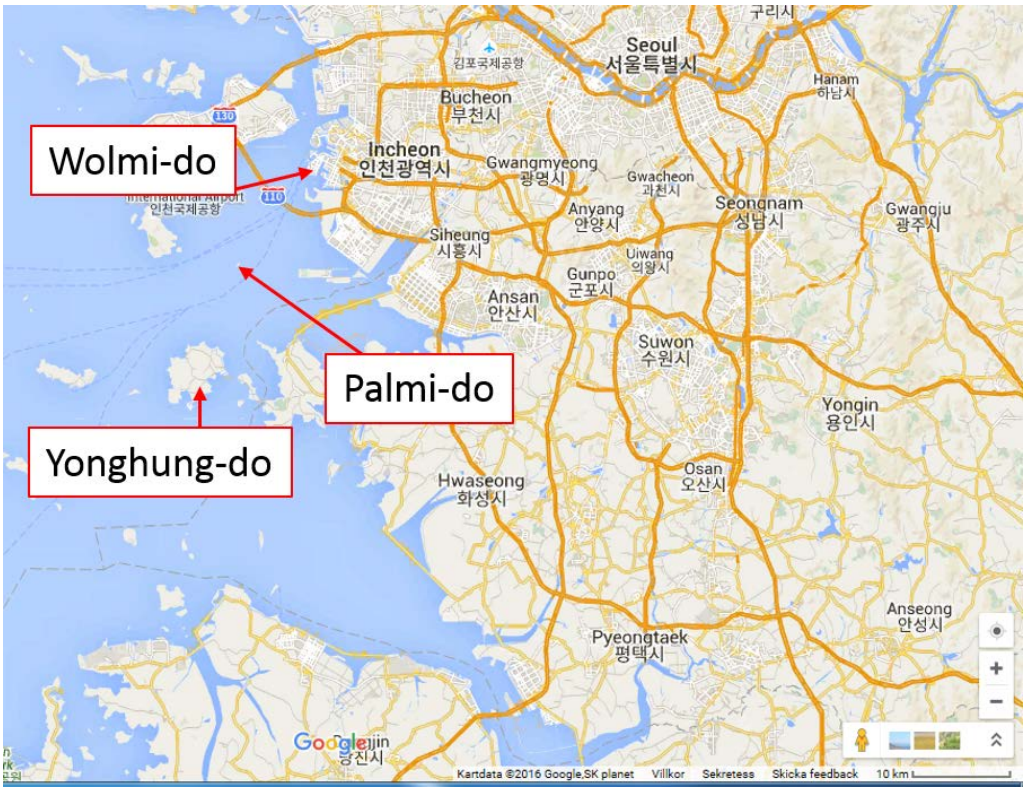

Figure 10. Area of Operations.[325]

322 Ibid., 26.

323 Ibid., 27.

324 Ibid., 30.

325 Adapted from Clark, *The Secrets of Inchon*, 2. Maps from Google Maps. https://www.google.se/maps/.

Clark needed to negotiate and coordinate with the village elder to set up his base. He also coordinated his initial activities with another small amphibious South Korean force, roughly 10 men, already operating in the area. Clark did the actual planning on route to Yonghung-do before he arrived and set up the base.[326] Eventually, relationships were established, and the village supported the operations with roughly 100 young men as an indigenous island defense force. The auxiliary force was organized, led, and equipped by Clark's men for the whole operation.[327] This force contributed including the defense of Clark's small command post. The village also supported Clark and his group with food and other logistics such as transport.

After the island was secured, on 1 September, a small camouflaged base and the team's radio station was set up.[328] There were still a few North Korean sympathizers on the island, and Clark's team later interrogated them.[329] This threat of infiltration by either North Korean sympathizers or forces was constant. Clark and his team needed to be vigilant about the threat through the duration of the operation. Also, the first contact with Tokyo was made to let the higher command know of the situation as the location of the reconnaissance team.[330] The location suited Clark's purpose well. From the base, Clark was able to watch Inchon and the heights above Inchon. More, the approach to the harbor itself was observable from the island.[331]

a. The Execution

Clark used several methods for collecting the needed information. Clark and the South Korean commander refined the collection plan and worked out the essential element of information needed for Operation Chromite.[332] The apprehended North Korean sympathizers on the island were interrogated. The interviews and the

326 Clark, *The Secrets of Inchon*, 35.

327 Ibid., 44–46.

328 Ibid.,.42.

329 Ibid., 54.

330 Ibid., 47.

331 Ibid., 56.

332 Ibid., 56, 64, 68.

interrogation provided general information, which was then used as starting points for the collection process.[333]

Of particular interest were the navigational lights and the lighthouse on another nearby island, Palmi-do, close to Inchon. Clark wanted to know about the possibilities of mines, gun types and locations, the hydrography, slope and type of beach, and whether the mud could hold a tank or a ship. He also wanted to know whether there were any indication that the planned amphibious assault was known to the North Koreans.[334] Over the coming days, Clark developed the situation and the methods required to collect the information. Presented with a problem, Clark assessed the situation with his team members as well as with a few village leaders.

First, Clark used some islanders and fishermen as surrogates to collect information during their day-to-day business travels to and from the island and the mainland. Over the period, Clark developed a network of collector-couriers that even stretched into Seoul and the planned avenue of approach after the landing at Inchon.[335] During the night, Clark conducted close-target reconnaissance of the beaches and the defense in and around the islands and Inchon. In the daytime, he used small boats and junks to move around the littorals searching for possible enemy activities and capture of prisoners. Also, Clark organized and directed "mine searching patrols," where some islanders cruised around the straits searching for North Korean sea mines.[336]

After revising the collection plan, detailed planning started in earnest on 2 September.[337] As an example, Clark began the expansion and development of a reference point and reporting system of targets around Inchon.[338] This system became of use later in the pre-landing and bombardment phase before the amphibious assault.

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333 Ibid., 59.

334 Ibid., 57, 65.

335 Ibid.,. 224, 264.

336 Ibid., 110, 126, 241.

337 Ibid., 65–66.

338 Ibid., 67.

At the first light on 2 September, Clark started, from a distance, to watch the approach and the area towards Inchon from his forward base on the island of Yonghung-do.[339] From then on, an observation post manned by the islanders, also acting as a part of the island security, was constantly watching the approach to Inchon. Of particular interest and focus for the collection became a third island, the island of Wolmi-do, just outside Inchon. If that island was fortified and run by North Koreans, the island needed to be seized first. Otherwise, the amphibious landing could not take place at Inchon's beaches and harbor.[340]Therefore, Clark used the fishermen and civilians, now more of a resistance movement, to collect the information, and he also conducted close-target reconnaissance to confirm the enemy employment and position of this island.[341]

Between 3 September and 8 September, Clark advanced the situation in and around the islands using various collection methods. However, on 8 September, Yonghung-do came under attack by a small North Korean force who used the low tide to walk across the straits. The attack was repelled. Clark requested naval gunfire support that arrived in the shape of a cruiser on 9 September. The island from which the North Koreans had attacked was bombarded. This action gave Clark some room to maneuver and focus on collecting the information, since the North Koreans feared another attack or raid.[342]

Clark personally conducted a successful close beach and target reconnaissance of the Inchon harbor and beaches, on the night between 9 to 10 September.[343] He learned about the tide and the sustainability of the mud by measuring and confirming the seawalls at the harbor.[344] The seawalls were extra difficult obstacles that needed a solution. Otherwise, the troop landing crafts could not be used.[345] Eventually, Clark's

339 Ibid., 72.

340 Ibid., 72.

341 Ibid.,. 227, 229.

342 Ibid., 240.

343 Ibid., 249.

344 Ibid., 249–52, 258–59.

345 Ibid., 70–71.

recommendations and information allowed the troops to climb the walls.[346] Also, Clark discovered and confirmed landing beaches, an avenue of approaches and exists, and some of the enemies' dispositions.[347]

On 10 September, another indigenous civilian guerrilla group made contact through the islanders on Yonghung-do and offered their services to Clark. This group had access to Seoul and the approaches to the city as well as the heights surrounding Inchon.[348]

Also, on the night of 11 September, Clark conducted a reconnaissance of the unhabituated island of Palmi-do to confirm the status of the lighthouse.[349] The lights were operational and could be used to guide the landing fleet to the beaches of Inchon. Clark was therefore given the order to switch on the lights on the night of 15 September.[350]

The pre-landing bombardment of the Inchon area had already started on 7 September.[351] It continued intermittently with the airstrikes on Wolmi-do from 10 September.[352] Later, the fixed relationship with the new guerrilla group that had access to the surrounding heights changed the approach. Clark changed the focus of the collection. He set up observation posts to mark and report several targets for the bombardment of Wolmi-do and Inchon, which actively started over 12 and 13 September. Air strikes and naval gunfire from ships moved periodically in the area and back to strike.[353] Clark taught the routines and marking of the targets to the guerrilla group so they could also conduct bomb damage estimates and report of new targets. Even if this was successful in

346 Ibid., 320.

347 Ibid., 252–54.

348 Ibid., 263–64.

349 Sheldon, *Hell or High Water*, 10.

350 Clark, *The Secrets of Inchon*, 261.

351 Sheldon, *Hell or High Water*, 8.

352 Rottman, *Inch'on 1950*, loc 1148.

353 Clark, *The Secrets of Inchon*, 288.

the long run, Clark lacked a two-way radio. Therefore, the retargeting, reporting, and assessment had a turnaround time of roughly 24 hours.[354]

Among the last tasks Clark and his team conducted was to improve the counter-mine patrolling of the channel, from 13 September, since the naval ships had found some floating mines during the bombardment.[355] Finally, on the night to 15 September, Clark and his team broke camp and moved to the island of Palmi-do and turned on the lighthouse to guide the invasion fleet towards the landing at Inchon.[356] Ultimately, Clark and his two South Korean officers joined the flagship, USS *Mount McKinley*, in the early morning of September 15.[357]

b. General Analysis

There were other places as alternatives for an amphibious assault, for instance, the beaches at Kusan 169 kilometers south of Inchon. However, this particular reconnaissance was not successful.[358] At Inchon, the First Marine Division, followed a couple of days later by one army infantry division, conducted a successful amphibious assault deep behind the North Korean lines to open a new front. It was a purposeful decision to choose Inchon as the landing area. Tactically, battlefield surprise was lost since the U.S.-led forces had shelled the North Koreans a couple of days before the landing. Also, the U.S.-led forces had used maritime raids around the coast over a period of time. The activities had conditioned the North Koreans. For the North Koreans, it was a "new normal." Nevertheless, the hydrography for an amphibious assault was not optimized. This gave the U.S.-led forces an advantage based on operational surprise, a surprise from which the North Koreans did not recover until much later when China entered the war.

354 Ibid., 293.

355 Ibid., 293.

356 Ibid., 309, 318.

357 Ibid.,. 319.

358 Rottman, *Inch'on 1950*, loc 1050.

Further, the force-on-force comparison, including the air and the joint fires superiority, gave the U.S.-led forces an advantage against the North Koreans. The landing force of Marines with support totaled a force of about 28,000 personnel.[359] More than 230 ships of various sizes and types took part in the operation.[360] The opposing North Koreans, in the immediate landing area, had nearly 2,700 troops. In the whole Inchon-Seoul area, the North Koreans had a strength of roughly 7,000 soldiers.[361]

Clark's team and his surrogate forces provided the hydrography and the tide schedule for the entire amphibious landing. The invasion fleet started to land at Wolmi-do Island to secure the inlet to the beaches and harbor for the following waves of Marines.[362] Troops secured the whole island within six hours.[363] Later in the evening, with the flood tide, the following waves landed at the Inchon harbor, using ladders to climb the seawalls and other beaches, which had been reconnoitered by Clark. The two most important landing sites were secured before midnight on D-Day.[364] Also, the landing force had expected the tides and secured the logistics to expand the beachhead and the follow-on operation towards Seoul.[365]

Late on 17 September, the airfield close to Inchon was seized and secured.[366] On 18 September, the pressured U.S.-led forces broke out at the Pusan perimeter in the South. They forced the North Koreans to eventually withdraw all of their troops to cross the 38th Parallel. Finally, on 25–26 September, the Marines from Inchon recaptured Seoul, and on 29 September, according to Sheldon, "MacArthur holds a victory ceremony … formally returning South Korea to President Rhee."[367]

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359 Ibid., loc 736.

360 Clark, *The Secrets of Inchon*, 319.

361 Rottman, *Inch'on 1950*, loc 1056, 1082.

362 Clark, *The Secrets of Inchon*, 319–20.

363 Michael Langley, *Inchon Landing: MacArthur's Last Triumph* (New York: Times Book, 1979), 151.

364 Langley, *Inchon Landing*, 152.

365 Clark, *The Secrets of Inchon*, 320.

366 Langley, *Inchon Landing*, 155.

367 Sheldon, *Hell or High Water*, xi.

3. The Use of SR Principles and SR Theory

Coordination: Clark had to coordinate with several entities and forces before and during the operation to clarify and set favorable conditions. Clark put extra emphasis on the support not only for his team but also to be able to help the indigenous people if needed. He also had to coordinate with the department and section that received his reports and the ships, he was about to use, with various insertion and gun platforms. One example of this is the sudden appearance of a cruiser (USS *Hansen*) that came to extract Clark and his team after the North Koreans had withdrawn. Instead, Clark used the cruiser to bombard and shell the closest North Korean island and therefore gain more impetus and freedom of maneuver for further collection, since he had not collected actionable intelligence and reached Relative Certainty at the time.

However, Clark's extraction plan seemed not to be well planned or coordinated. The material does not mention the extraction. Eventually, the extraction occurred when Clark, from the lighthouse, saw the flagship of Operation Chromite and rejoined his forces. However, the primary reason for this was to get support to the Wonghung-do islanders who were at the time under attack from the North Koreans. The extraction seems therefore to be more happenstance.

Of particular interest are the coordination and integration Clark conducted with the villagers of the island of Wonghung-do and later with the guerrilla group that had access to the heights and into Seoul itself. Much coordination was needed to set up the surrogate courier collection and reporting system for the Inchon area. It was not only the reporting and tasking itself that needed allotment. Clark and his team formed a transport and logistics system for the collectors and the couriers. Therefore, the study finds that the principle of *coordination* was used widely during the operation.

Review: Clark continually reflected and examined his alternatives to gather information and assess what might be needed by higher headquarters. He steadily developed the situation and estimated priorities with the respective advantages and disadvantages. Therefore, the purposeful development of the situation and the iterative process and reaching back to Tokyo were important. During the operation, Clark actively refined the collection plan and the possibilities to gain access to the information with his

team.[368] The broad order and the priority intelligence requirements were key success factors. Clark had the ability to develop the intelligence requirements based on the commander's intent with what he confronted on the ground.

Furthermore, Clark needed to regularly revise and assess the risk to the mission, risk to force, and risk to his auxiliary forces and collectors. The North Koreans in the area more or less knew there was a small group of "Americans" on the island. Clark also made certain, since he knew about the forthcoming landing, that he could not be taken as prisoner. Therefore, he carried a grenade on his person and was prepared to use it on himself.[369] Moreover, Clark had his team working on several contingencies for alternative bases and observation posts. Among them was the island of Palmi-Do, even closer to Inchon, and the heights surrounding Inchon if they needed to abandon Yonghung-do[370] Overall, the principle of *review* was used. The study finds that this principle was a key to the success of the operation.

Cover: Clark conducted what could be a semi-discreet operation. The force used the island of Yonghung-do as a forward operating base. Clark organized and used the auxiliary forces to guard and protect his command post and small base. Eventually, the American presence became known to the North Koreans, and Clark would have more difficulty performing his SR mission without the secured and protected base.

He also had knowledge of Korean culture. He had the support from his two partner South Korean officers to work by, with, and through the South Korean civilian sympathizers and fishermen on the island to gain access to named areas of interest for the landing. Clark used the turmoil and the uncertain situation caused by the frequent raids conducted by the U.S.-led forces in the littorals and the natural pattern of life to cruise around the islands with his junk. During the cover of darkness, Clark could get access to the future beach landing sites and other places of interest to conduct close-target reconnaissance.

368 Clark, *The Secrets of Inchon*, 56–57, 62.

369 Heinl, *Victory at High Tide*, 67.

370 Clark, *The Secrets of Inchon*, 72.

The auxiliary forces also supported, protected, and enabled him and were acting as a backup during the close-target reconnaissance tasks. This cover was needed since the North Korean military police forces occupied the areas of interest. Moreover, Clark had the advantage of having a small South Korean gunboat in direct support for most of the operation. Further support was offered and used in case of extraction by the United Nations' naval forces and ships that operated not far from Clark's base. An example of this is the cruiser USS *Hansen* that came and offered to extract the team. It is found that Clark used the principle of *cover* throughout the operation. He could not succeed his mission without the support of the indigenous guerrilla forces and civilians. It would have been difficult to gain access to the information and protect and support the operation without them. The presence of an SR team known to the adversary may not be optimal for an SR mission. Clark understood the situation and did successfully use the *cover* and protection he had available and therefore created access to the information needed.

Reporting: The SR team had a powerful and robust two-way communication with the higher headquarters, and Clark could report on prearranged times at least once a day.[371] There is no mention of any difficulties of sending or receiving the intelligence reports and updates. The study finds that all the essential intelligence requirements were answered and communicated in a timely and accurate manner. The proof of this is found in the ladders used by the Marines storming the seawalls, the final landing beaches, objectives, and the schedule for the entire amphibious landing.

The only problem facing the SR team was the difficulty communicating with Tokyo if the team was in danger.[372] Also, Clark expressed the wish and possibilities to communicate directly with the airplanes and naval gunships during the targeting during the pre-landing bombardment. The targeting was delayed for almost 24 hours because of the courier system and indirect approach used by Clark. Eventually, it had no effect on the result of the landing. However, there could have been a different result if there were significantly more North Korean targets that needed to be destroyed before the landing. It would be fair to assess the information would have not been of value and use if the

371 Sheldon, *Hell or High Water*, 7.

372 Clark, *The Secrets of Inchon*, 72.

information had been sent to the higher command after 13 September. After that date, the landing force was en route to Inchon, and there would not have been enough time to work the details into the plan. Therefore, in all, Clark had less than two weeks to collect and confirm the information. However, Clark's team answered all the significant intelligence requirements. He knew the purpose of his mission and the importance of his information reaching the right customer at the right time. Therefore, the principle of *reporting* contributed to the successful amphibious landing.

Exploitation: Clark and his team made use of different collecting methods building on the starting point of various methods, and the team assessed and took advantage of this when a particular situation developed, such as when the new guerrilla group in Inchon and Seoul offered its services.

Another example of exploitation is the establishment and use of the targeting around Inchon during the pre-landing bombardment. At this time, Clark had answered the intelligence requirement directly related to the approach and the hydrography of Inchon including the mud and the littorals. He was at the location and took the initiative to exploit the situation further and support the targeting. Indirectly, Clark had already been given the task to report on enemy employment. However, the follow up with the bomb damage assessment, re-targeting, and control of the targets ashore is assessed to be Clark's initiative in direct support of the landing, because of the access initially provided by the guerrilla group. A further example of exploitation is the use of the reconnaissance team to turn on the light at the lighthouse and therefore act as a guiding force for the invasion fleet.

In sum, the mission achieved relative certainty the night of 10 September, after Clark had conducted the close-target reconnaissance of the beaches, the mud, and the Inchon harbor and its seawalls. The primary intelligence requirements were from then on answered and subsequently reported (see Figure 11). Clark himself mentions that he "was feeling pretty good about the offshore and beach information we had. But we were still lacking in the information that would cut anticipated casualties to a minimum."[373] This

373 Clark, *The Secrets of Inchon*, 259.

situation, however, became an opportunity and priority after 10 September, but there was actionable intelligence to conduct the landing at this point. All other information collected after then contributed to the security of the landing itself and the direct destruction of the enemy.

The higher command only knew that Inchon, the tide, and the beaches were difficult. No details were available before Clark and his team started to collect the target area of interest. It would have been a major gamble and a high risk or cost to launch the landing before actionable intelligence was collected (see Figure 11). During the first week, Clark could gather the information about the trend of the tide and confirm that the American charts were off, and the Japanese charts from World War II were right. Also, he could develop more intelligence using the established collector-courier system. Clark only refined the targets, mostly enemy positions, and strength, after his 10 September visit and confirmation of the lighthouse. The target refinement phase focused primarily on bomb damage assessment. The exploitation phase overlapped during the last days before the landing and the pre-landing bombardment around Inchon and the island of Wolmi-do.

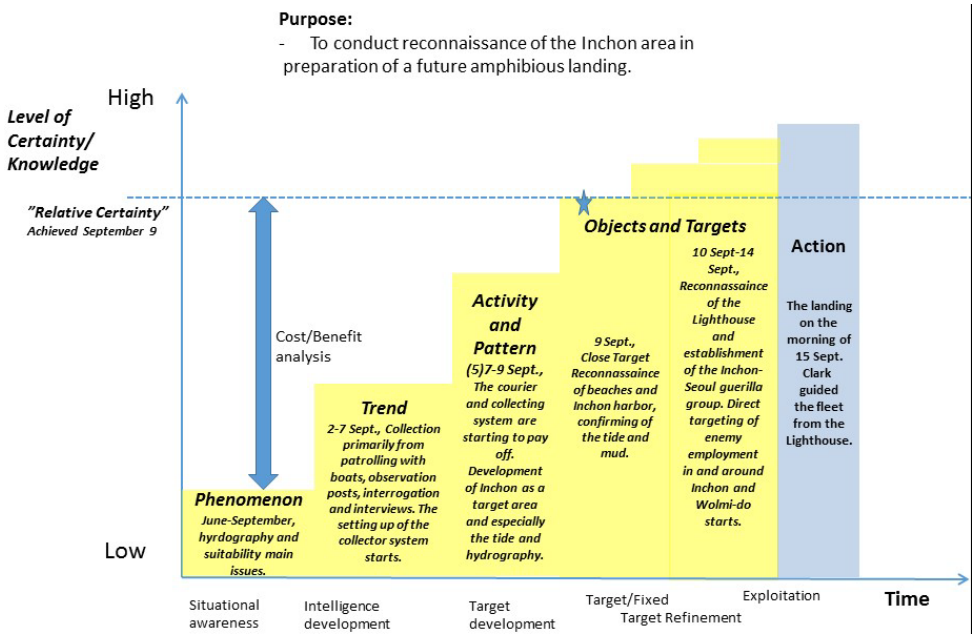

Figure 11. Relative Certainty for Operation Trudy Jackson

B. CASE STUDY CONCLUSIONS

The study considers the SR mission to be more of a time-based operation than a trigger-based operation. The landing was already planned for 15 September. Sometimes, however, conditions are not in place, when a certain time or date dictates a decision to launch an operation. The conditions and information still missing for a decision can be either of friendly forces nature as well as enemy forces or of a terrain matter. A trigger-based operation could sometimes be preferable for a collector or operational planner. The launching of a follow-on operation is not depended on a pre-set time. For a trigger-based operation, certain conditions (triggers) for the operation are met or are very close to being met. When the triggers are met the decision to launch an operation can be made.

The U.S.-led higher command sought to confirm other locations as well, but early on, Inchon was decided to be the place to land. According to MacArthur, the advantages of surprise and the possibility to cut the North Koreans' communications lines overweighed the disadvantages and the risk involved in Operation Chromite. More intelligence, in particular information about the hydrography around Inchon, was needed. To overcome the risks and lower the uncertainty, if that turned out to be unsuccessful, there is no record of an alternative amphibious landing, other than Kusan further South, which the U.S.-led forces were also looking at. However, from an operational point of view, Kusan was less suitable. Therefore, Inchon was more or less the only available choice.

Clark exploited and developed the situation. The situation on the northwest coast was uncertain, both for the U.S.-led troops but also for the North Koreans, and there had already been several smaller raids and landings in the area. Also, the civilians tried to live "a normal life." This turmoil and uncertainty allowed Clark to operate and blend in his surroundings and contributed to a successful SR mission**.**

The iterative process of tasking and reporting is important. The possibility to ask for clarifications or receive a redirection of new opportunities for collection should not be understated and in this case contributed to the *coordinate* and *review* principles. All the principles were present and used in Operation Trudy Jackson. *Relative Certainty* was

achieved 9–10 September, and General MacArthur decided to follow through with his original thought to land in Inchon (see Table 6).

In conclusion, the successful execution of the operation can be traced back to constant iterative tactical planning by Clark and the implementation and continued use of foremost the principles of *review*, *reporting*, and *exploitation* of the situation. Clark used the *coordination* and *cover* principles to support this effort.

Table 6. The Use of SR Principles during Operation Trudy Jackson

Operation / Controllables	Op Trudy Jackson	Comments
Coordination	With several units and entities within the US Led force and guerrillas	Foremost in the Execution phase, but also in Preparation phase
Review	Constantly assessed and weighted options for improvement and access to the information and refining of the collection plan as well as the contingencies.	Preparation to Execution phase
Cover	Multiple layers of Cover, Back up and an E&E plan	Execution phase
Reporting	Sent intelligence reports continously.	Execution phase
Exploitation	Developed and exploited the situation constantly. The operation also contributed to the targeting of the enemy and guiding the force during the landing	Execution phase
Relative Certainty	Achieved, Successful	Meeting the threshold of sufficient intelligence (actionable or not) for confirming Inchon as suitable for landing an amphibious force, thus lowering the uncertainty

Green: Principle used; Yellow: Somewhat used; and Red: not used or Unsatisfactory.

With this chapter and final case study, the thesis now turns to the last chapter and conclusions. The chapter summarizes the research, answers the research question(s), proposes further research, and suggests a theory *of* special operations.

VI. FINDINGS AND CONCLUSION

A. A THEORY OF SPECIAL RECONNAISSANCE AND SURVEILLANCE

This thesis is a comparative case research on the SR relationship to special operations and intelligence. The thesis contributes to specific military theories of intelligence and to theories of special operations since neither theories have been agreed upon.[374] At the same time, the thesis brings the theories of intelligence and special operations closer since SR is a part of both domains or areas.

1. Preliminary Theoretical Framework Development

This study began with an examination of the literature on the subject of intelligence as well as special operations. SR is a mission that is part of intelligence and part of special operations. Therefore, a suggested theoretical framework, current doctrine, and intelligence theories including the intelligence cycle are subject for the study (see Appendix A). Apart from doctrine, the study uses McRaven's theory and principles, Yarger's suggested special operations principles, and to some degree Hall and Citrenbaum's collection principles.

2. Framework Applied to Three Cases

The study uses principles from intelligence and special operations to develop a lens with controllables to observe the selected cases. The controllables were the suggested and the directly related principles of SR: *coordination*, *review*, *cover*, *reporting*, and *exploitation*. This model and the suggested SR theory of relative certainty served as the framework for the analysis of historical SR missions. Relative certainty is considered to be a certain threshold. The threshold is sufficient actionable intelligence on the target, the enemy, or situation depending on the mission. Also, the intelligence is available for the decision maker to make a decision.

374 For special operations, also see, for instance, Marsh, Kiras, and Blocksome, "Special Operations Research."

In sum, this study suggests that policy makers, planners, and military intelligence collection units should pay attention to certain SOF principles to take risks, and successfully access, collect, and answer intelligence requirements. Eventually, the SR effort strives to achieve relative certainty. By contrast, general intelligence seeks to reduce the overall ambiguity.

B. ANSWER TO THE RESEARCH QUESTION(S)

The aim of this study was to answer the questions: Are there certain principles for SR? And if so, what are they, and can there be a related theory? The evidence suggests that there are other variables to consider when a collector performs an intelligence collection mission, besides the current principles of war (battle) or current SOF principles. Mainly, the study asserts that the principles of *review*, *coordination*, *cover*, *reporting*, and *exploitation* are a key part of SR operations.

The operational purpose of SR is mainly to collect actionable intelligence or to develop a situation to gain more knowledge. The overall goal is for certainty to increase. SOF is both a consumer and a provider of detailed and multisource intelligence. An action organization needs detailed intelligence to destroy or capture high-value targets, rescue hostages, seize an objective, or conduct a high-risk raid of some sort. Usually, the higher echelon intelligence departments or the intelligence services provide this specific intelligence. And this intelligence can then be further refined by SOF intelligence collection elements to suit the needs of a strike arm.

With the use of dedicated and directed intelligence resources to collect intelligence, this study suggests a theory of SR as a function of time and certainty with a necessary part: the condition of relative certainty. It is the condition when there is sufficient intelligence available to action a target. This condition is called *relative certainty* as opposed to *absolute* certainty since absolute certainty is hard to achieve until "after the fact" or after an event has occurred. Relative certainty is based on actionable intelligence that allows a decision maker to decide to act or *not* on the intelligence presented. However, a decision maker needs not only information on the adversary and target, but also on oneself to make an informed decision. And, usually, it takes longer

time and other resources to reduce the uncertainty and develop (actionable) intelligence. The best use of SOF SR is to gather the final pieces of information or raw intelligence and confirm a target. The SR theory and graph can support and analyze a mission before, during, and after the result of a mission. Also, the theory can be modified to support a general collection theory.

1. Summary of the Case Studies

The results from the case studies (one unsuccessful and two successful cases) demonstrated that a successful SR mission depends on constant iterative planning and preparation with the use of the SR principles *review* and *coordination*. The possibility to ask for clarifications or receive a redirection of new opportunities for collection should not be underestimated. This interaction contributes to the *coordinate* and *review* principles. They are also necessary during the execution phase. Also, *cover*, *reporting*, and *exploitation* are necessary during the execution phase. However, achieving *Relative Certainty* to decide on a direct action does not automatically imply a successful strike operation since this is another operation and relies on principles of direct action. In short, the use of SR principles will improve the possibility of successful SR missions.

This study suggests that the relative certainty theory can support the decision maker *before* the decision to act. Also, the theory is useful for after action analysis. In simple terms, are the intelligence requirements answered, satisfied, partially satisfied, or not at all satisfied? However, relative certainty or detailed intelligence contribute to the direct action principle of simplicity. Good intelligence, with the purpose to reduce the unknown, is one of three elements supporting the principle of simplicity.[375]

In sum, SOF has unique skills, abilities, techniques, and methods to create access to a target, which no other unit, force or organization has. The access to information, obvious in the cases, can be from a few meters to several kilometers, and it depends on the task, risk, intelligence requirement, terrain, and threat. This ability and the use of the principles and resources such as time contribute to the successful collection and satisfactory answers the intelligence requirements. Because the study focuses on cases

375 McRaven, *Spec Ops*, 11–12.

involving several collection methods and different conflicts, it can asserted to be a generalized theory. However, further testing is needed to make a universal assertion of applicability.

a. Results and Discussion

One of the insights gleaned from this study is the importance of common understanding and interpretation of the intelligence requirement(s) and the task. Furthermore, SR can be an SOF contribution to the collection part of the "larger" intelligence cycle. One area in the intelligence process, not directly studied in this research, is the analyzing part of the intelligence cycle. For intelligence to be called intelligence rather than just information, the collected information normally needs to be evaluated and analyzed. Planning is important for intelligence and SR missions. Some key considerations, like the suggested principles of this thesis, are more important than other principles on SR missions.

Usually, SOF uses a high degree of mission command. Even if the customer wants a specific product or to use a certain collection method, it might not be the best way to answer the intelligence requirement, as suggested in the case of Operation Trudy Jackson and the Inchon landing. The common understanding of the purpose and the intelligence requirements with the iterative actions contributed to the overall success. This was not present in Operation Plum Duff. Also, in the case of Operation Plum Duff politics, turf war, and decision makers' personalities sadly played a role. Usually, the intelligence section takes a longer time to produce a report on intents and capabilities, and the most likely course of action on the enemy, compared to the operations section's development of an estimate over friendly courses of action. The operations section development normally takes less time. Therefore, foresight and proactive planning including the correct approach of collection and analytics are normal characteristics of intelligence.

Notwithstanding, this research has showed that the decisions based solely on the report from SOF achieved relative certainty. No further analysis or collection was

needed, which is an interesting observation and worthy of notice. However, one has to be careful not to neglect the analytical process.

As in all intelligence matters, *time* is of essence. For example, how much time is available to plan, prepare, collect, and process the product? When does the customer want the intelligence report or the reconnaissance report (latest time of value)? Clear and concise intelligence requirement and common understanding are essential. Ambiguity and high operational tempo are characteristic of modern military conflicts and operations. If it is true that commanders need more information to make decisions, then the ambiguity may create a dilemma. A delay in the intelligence cycle and assessments can cause delays of decisions and proper action. Therefore, it is important for SOF intelligence to continue to be credible and reliable. Moreover, in the future, there may well be changes so intelligence reports will not be collated or analyzed at the unit level. Some of the reasons may be the urgency of the information or a shortage of analysts. Therefore, the intelligence customer must have some understanding of SOF intelligence including the planning process, collection capacities, and formats. The use of an SOF liaison element is a necessity. Also, the intelligence analyst or the collator at every level should be part of this mechanism. Importantly, collectors and analysts must work more closely together, and there should be a clear idea of the mission of higher commands, future intent, and decision points because this also gives an understanding of the time available.

SOF intelligence collectors should use the opportunity to collect the information using several means and sources. This approach will result in a multi-sourced and detailed intelligence product, which will be a way to overcome the uncertainty. This method is the ideal solution.

However, there are times, depending the stakes, one has to take the risk and access a target or decide to launch despite the absence of relative certainty. SOF personnel are selected, trained, and equipped to access a target area with a certain risk to mission and risk to force. Usually, the decision maker and the unit are willing to accept the risk gap. However, this risk depends on the mission, purpose and the relevance of using SOF and what is at stake.

To summarize, a shared, graded multisource intelligence report from the unit to the right receiver, at the right time, and presented in the correct format are important. The SR mission is complete when the enemy has not detected the mission, the real purpose is still unknown, and the intelligence report has been disseminated to the right receivers at the right time.

2. Suggestions for Further Research

Further studies are recommended to contribute to the debate, support of development of doctrine, and strengthen the overall SOF body of knowledge. This chapter recommends case studies based on SOF from additional conflicts and time periods, with a focus on several collection methods. The focus would be to confirm, deny, and compare the principles and theory. Also, personal interviews and participation in operations and exercises to observe the controllables are preferable. Furthermore, a comprehensive study of accessible after actions reports and operations summaries would be desirable.

Of particular interest to further research would be the use of ISR technology, cyber operations and surrogate or even proxy forces. For an example, what role can traditional SR operations have in the cyber domain. Also, Military human intelligence, that is source or contact operations, and the use of the SR principles can be subject to in-depth research. Such research could follow the model depicted in Figure 12, where each of the "boxes" and levels of war can be subject for further research.

Other fields and areas are subject to further studies. For instance, technology will allow for improved awareness and individual protection and performance in the future.[376] Most likely, the technology developments and the selection and training of special operators will enable future collectors to work in even smaller teams, possibly even pairs and singles. With this approach, would it be possible for a collector to lower the risk of compromise and detection. Also, SOF needs to be masters of both the "high tech and the low-tech," to find and fix a specific target or to understand an operational environment.

376 Espen Berg-Knutsen and Nancy Roberts, eds., *Strategic Design for NORSOF 2025*, NPS Technical Report DA15-001 (Monterey, CA: Naval Postgraduate School, 2015).

What are suitable "high tech and low-tech"? The collection method and approach is usually not "a given." The SOF collector needs to master several collecting methods to be certain of the access to the information. For instance, the collection of biometrics for pure identification purposes or for a judicial trail will be in high demand. Also, the need for rapid employment to provide ground truth by a "simple pair of eyes on." Therefore, what type of selection, training, and education do SR operators require in the future?

Paradoxes and contradictions are interesting to study. Hall and Citrenbaum suggest a principle of "massing and maneuver" of intelligence resources, as does the Flynn article with the use of massed ISR.[377] Usually, SOF is highly maneuverable and has access to different platforms. However, as mentioned by McRaven, SOF operates in small independent teams instead of massing of units. Instead of mass as in numbers, "mass of methods" against a target can be subject of a further study. In other words the value, or not, of redundancy and combination of collection methods. In particular, how can small SR units employ several collection methods in a non-permissive environment? Also, in this environment, is it possible to assemble several teams working independently towards an objective without compromising the mission or the overall mission? The principles of coordination and review would likely play in important part in such a study, but that could be subject to the research in itself.

Finally, this study had one case, Operation Plum Duff, which was unsuccessful. Of particular interest would be to find and study unsuccessful SR missions, and to study why and how the operations did not succeed. Normally, only successful campaigns and operations are used for studies. Yet, there is value to study failed missions (regardless of the core activity or mission) since it would be useful to compare the findings of this study.

3. Implications for Doctrine and Policy

The SOF community has the obligation to focus on all the core activities. However, the current and skewed paradigm focused on direct action of special operations

377 Flynn, Juergens, and Cantrell, "Employing ISR."

hampers the doctrine development, which can contribute to less than ideal utility of special operations.

There will always be a need for information and intelligence. Future conflicts will be of both low intensity and high intensity in nature and even a combination of that. The operational battlefield will most likely continue to be in all the domains, including cyber and the urban domain.[378] It would be advisable to let SOF units collect the intelligence when and where it is most useful and not restrict the use of SOF employment. Also, strategic utility of SOF and especially of SOF intelligence could be in line with what Colin S. Gray states, with SOF having the role of the innovated force and laboratory for developing new capabilities.[379] This utility should continue to be a "task" for SOF. Also, the task would include civilian agencies as preferred partner organizations. To suggest lessons learned, technology and best practices can be shared, and coordination between organization and agencies can overcome compartmentalization and over-classification. To carry out this, most likely, there is a need for updated policies, authorities, and mandates. To be more efficient, authorities need to be in place, and partnerships have to be sanction by the proper commands and authorities.

Intelligence technology, collection methods, and the processes of today and tomorrow require that operations officers, collators, and analysts work closer to the collector and source and the operational environment. The analyst and the collector need to work even closer together and build on one another to develop credible and actionable intelligence. This approach will be true in a conflict where time and trust are of the essence. It is also necessary to have a constant understanding of what the other organizations and branches can provide and also know certain expertise and subject matter experts. This needs to be ready in peacetime. Therefore, the policy needs updated authorities and mandate. All this will contribute to enhancing the objective of relative certainty.

378 Kilcullen, *Out of the Mountains.*

379 Gray, *Explorations in Strategy*, chapter 8.

Today, general purpose forces or other organizations are performing operations that a few years ago only SOF did. SR can therefore be at a crossroads. Will SR still be a part of SOF core activities in the future? Or will certain technology, other organizations, and commands satisfy the intelligence requirements? According to one technical report, one challenge of the future of SOF is to find new tasks and core activities, because general purpose forces are now conducting some of the missions.[380] However, in the future, SOF will most likely continue to perform in a high-risk environment. The utlity of SOF SR to create access to the information will certainly be of high demand. Nevertheless, SOF and SOF intelligence need to continuously be developed to overcome problems and threats. SOF will have to support and work even more closely with civilian authorities and agencies, and this will have implications for policy. One of the reasons is countries' legislation and laws may need to change for SOF to work more closely with other agencies and organizations.

Also, one challenge is to communicate and report in a contested environment with an enemy who can disrupt the communications. If that is the case, the *exploitation* principle of SR will be even more valid. SOF units would need the authority and the ability to act, and immediately follow up on actionable intelligence. SOF units may have to be capable and have the ability to switch to different roles, thus compressing the fix, finish, and exploit cycle. Therefore, doctrine, organizational design, and policy may need an adjustment.

One way to develop SOF SR for the future doctrine development is in the deception–counter-deception domain. SOF should consider deception and counter-deception operations as a core activity, like direct action, unconventional warfare, and SR. SOF unique characteristics and SOF intelligence are suitable for denial and deception operations. For instance, SR can be "channels" for intelligence collection and distribution of deceptive information. At the same time, SOF can be a part of a multi-collection effort to collect information with the purpose to detect and verify an adversary's deception

380 Berg-Knutsen and Roberts, *Strategic Design for NORSOF 2025*, 8.

operations.[381] The theory of relative certainty can be used to support deception operations as well.

C. TOWARD A GENERAL THEORY OF SPECIAL OPERATIONS

There is neither a unified intelligence theory nor a unified theory of special operations. And academics and scholars continue to debate SOF and special operations theory.[382] However, theories may not be agreed upon, because of the diversity of special operations as defined today.

This thesis attempts to bridge the area of intelligence and the area of special operations. The study also contributes to developing the special operations theory. The conclusions of the study strive to combine the SR principles with the principles of intelligence as defined by the joint publications and the general principles and theories of special operations subject to study. As mentioned, over the last decade, SOF development focused on direct action and other related strike operations. One assumption of this study was if McRaven's theory and principles, for direct action, are true, then what are the other theories and principles of the core activities? A suggested compilations of theories *for* special operations is depicted in Figure 12. Every core activity has its own column, and there are several columns by activity. Also depicted are the type of mission or approach. For SR, it is close-target reconnaissance, long-range reconnaissance, surveillance, and a suggested approach of source operations or source handling (see Figure 12). Naturally, there can be more collection methods and missions than suggested. What needs to developed for the model are the principles of the other core activities of special operations including unconventional warfare and as an example foreign internal defense. Moreover, the core activities' principles can apply to the levels of war (strategic, operational and tactical). Depending on the level of war, the various principles can have certain importance and weight. Also, determined by the purpose and mission, the core activities of special operations apply at all levels of war including operational and tactical level.

381 For more on deception, see Whaley and Busby, "Detecting Deception."

382 See for instance, Marsh, Kiras, and Blocksome, "Special Operations Research."

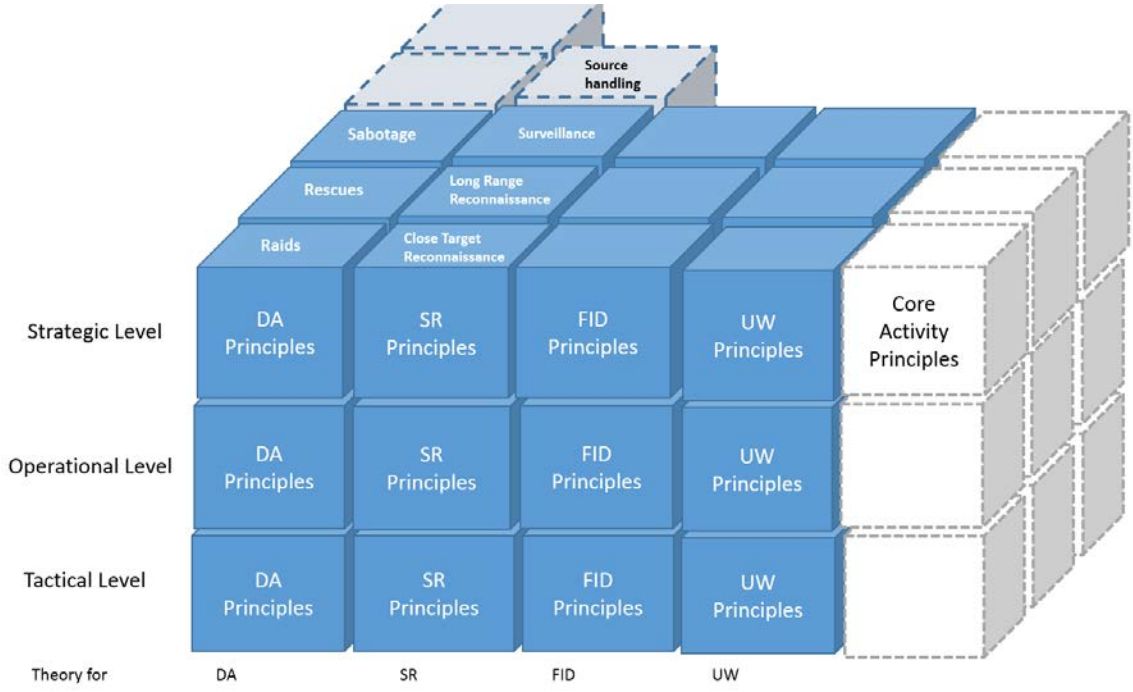

Figure 12. Suggested Compilation of Theories *for* Special Operations[383]

Furthermore, Figure 13 depicts a suggestion of a model of a more comprehensive special operations theory. The model shows the relationship between theories *for* special operations and theories *of* special operations and how they interact in conjunction with earlier assertions and research. The theories and insights of Spulak and Gray, with McRaven's theory and principles, and Yarger's principles with this research's SR theory and principles are integrated into this model. (See Figure 13). This comprehensive theory builds on Spulak's theory of special operations. He asserts that a theory of SOF and a theory of special operations mesh. Therefore, this thesis asserts Spulak's theory suitable as a foundation to a general special operations theory, since it is suitable for all the core activities. The suggested special operations theory rests on Spulak's SOF qualities and his describtion of the inherent characteristics of SOF; certain kind of access, intergrated operations, unconventional operations, strategic initiative and relative superiority.[384] The main purpose and strategic utility of special operations derive from Gray's suggestion of

383 Adapted from Cox, *Theoretical Framework for Intelligence*, Appendix 4, 12.

384 Spulak, *A Theory of Special Operations*, 23.

expansion of choice(s) and innovation.[385] The theory *of* special operations uses the general principles based on Yarger's observations. However, for special operations to succeed, practitioners need to apply the core activity's *specific* principles. In other words, the theory *of* special operations answers the *Why* of employing SOF and the utility of special operations to support including policy and development of doctrine and the general understanding. And the theories *for* special operations answers the *How* to set conditions for successful missions and to execute the missions in the best possible way.

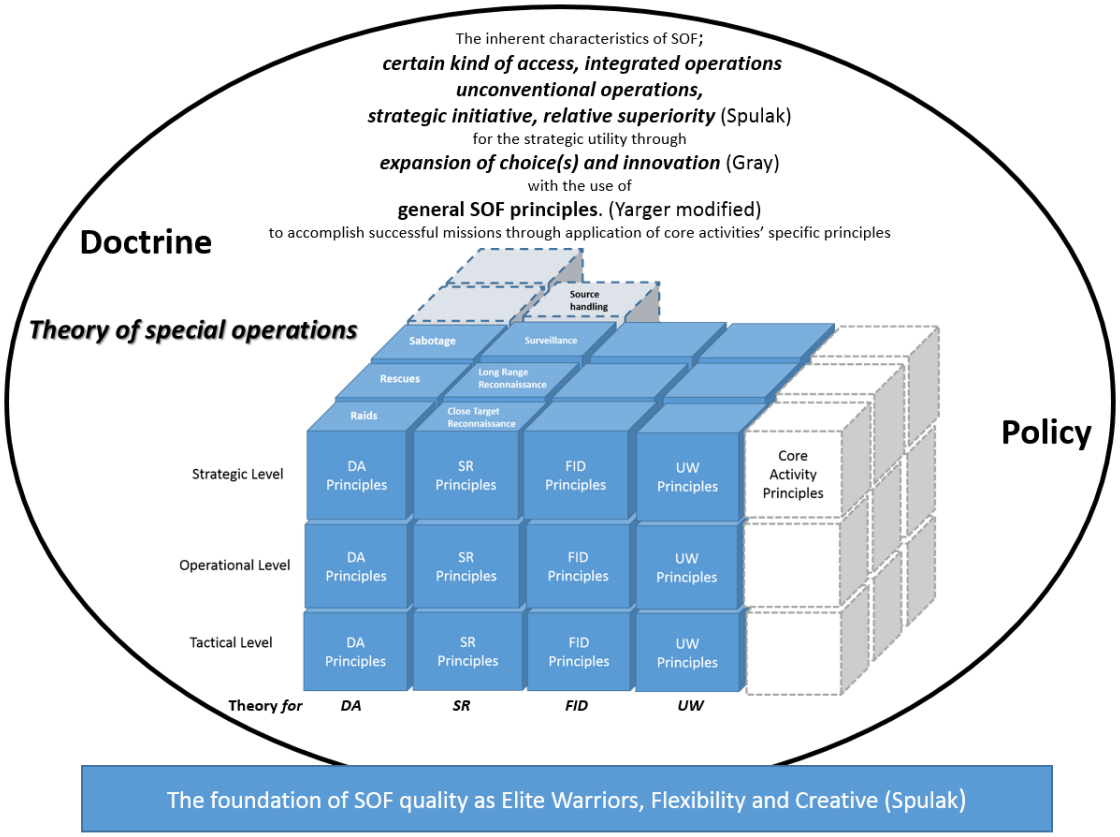

Figure 13. A Compilation and Integration of Theories *of* and *for* Special Operations

To conclude this study, history, current research, and debate prove are there is no "Holy Grail" or certain formula or code to crack. SOF scholars and practitioners should

385 Gray, *Explorations in Strategy*, Table 8.1, location 2493.

take a more comprehensive look and approach, instead of falling into the trap of what is current and of value for the moment. The study and debate on special operations should be as holistic, “unconventional,” and reflective as possible. Notwithstanding, the debate should not focus only on a certain paradigm. SOF can learn from others as well as others can learn from SOF, especially in the SR realm.

Overall, the use of principles is dependent on the situation and events, since the human being, war, and in particular warfare employed by SOF are complex. The principles can have a different weight in different phases. However, the practitioner should always consider the principles. This thesis concurs that special operations and SOF need certain SR principles to succeed. Moreover, these principles and characteristics are not typically part of the conventional approach and doctrine.

Finally, detailed and accurate intelligence is “hard currency.” Therefore, the future of SR and SOF intelligence looks bright. Nonetheless, SR should not be taken for granted and be disregarded. It is the aim of this research to serve as a departure point and contribution to the never-ending search for SOF and SR excellence.

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APPENDIX A. COMPARISON OF PRINCIPLES

	Doctrine	ADRP 3-05	Joint Operations	Joint Intelligence	Theory	Hall	McRaven	Yarger	Earlier Research
Principles	Discreet Precise Scalable		Objective Offensive Mass Maneuver Economy of force Unity of command Security Surprise Simplicity Restraint, Perseverance Legitimacy	Perspective Synchronization Integrity Unity of Effort Prioritization Excellence Prediction Agility Collaboration Fusion	Combinations and optimum mixes Indirect approaches Commander's feedback loop Think like the adversary Agility Human collectors Meet standards Collect on aggregates and complex adaptive systems Collection synergy Analysts provide focus Mass and maneuver Collection condition settings, [collection on] Intangible outcomes Power of the observer Collect on decay		Simplicity Security Repetition Purpose Speed Surprise	Relative superiority Direct action Purpose Understanding Initiative Surprise Simplicity Security Risk Management Warrior ethos Mobility Integrated operations Asymmetrical Operations Preparedness	Simplicity Security/Opsec Coordination Repetition/Rehearsal Review Purpose Stealth/Cover Reporting Proactive/Agility Massing and maneuver

Adapted from Yarger, "21st Century SOF," 63–67; ADRP 3-05, 1-6; McRaven,. *Spec Ops*, 11–21; JP 3-0, I-2; JP 2-0, II-1; Hall and Citrenbaum, *Intelligence Collection*, location 1858. Earlier Research, Westberg, "Special Reconnaissance and Surveillance: Emerging Theory and Principles for Accomplishing Successful Missions," 33

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